Jan: DELAVAL please.
Thanks!

Access DB# 94864

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Josephine YOUNG Examiner #: 79813 Date: May 21, 2003
Art Unit: 1623 Phone Number 308-6005-1201 Serial Number: 09/853,047
Mail Box and Bldg/Room Location: 8D04 Results Format Preferred (circle): PAPER DISK E-MAIL
8B19

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Polymeric compounds useful as prodrugs

Inventors (please provide full names): SAMPATH, Umashanker; TOCE, Joseph A.; NADJI, Sourena

Earliest Priority Filing Date: May 9, 2000

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Attached: (1) Pending Claims (1-9, 13-20); (2) Bib Sheet; (3) Assignment Info

Please search

(1) Inventors

(2) polymeric cmpd = w/ at least 1 active agent (see list in claim 2) and cmpd. of claim 21.

Thanks!

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TECH CENTER 1600/2900

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****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: JW	NA Sequence (#)	STN ✓
Searcher Phone #: 4495	AA Sequence (#)	Dialog
Searcher Location:	Structure (#) ✓	Questel/Orbit
Date Searcher Picked Up: 6/2/03	Bibliographic	Dr.Link
Date Completed: 6/2/03	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time: 30	Patent Family	WWW/Internet
Online Time: 110	Other	Other (specify)

PTO-1590 (8-01)

STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 94864

TO: Josephine Young **Location: 8d04 / 8b19** **Monday, June 02, 2003** **Au: 1623** **Serial Number: 09 / 853047**	**From: Jan Delaval** **Location: Biotech-Chem Library** **CM1-1E07** **Phone: 308-4498** **jan.delaval@uspto.gov**

Search Notes

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

STIC SEARCH RESULTS

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact***:

Mary Hale, Information Branch Supervisor
308-4258, CM1-1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk

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=> d his

     (FILE 'HOME' ENTERED AT 11:54:33 ON 02 JUN 2003)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 11:54:44 ON 02 JUN 2003
L1             1 S US20020013287/PN
               E SAMPATH U/AU
L2            13 S E3-E5
               E TOCE J/AU
L3             7 S E4,E5
               E NADJI S/AU
L4            14 S E3,E4
               E RELIABLE/PA,CS
L5             5 S E8-E12
L6             1 S L2-L5 AND L1
L7            31 S L2-L5 NOT L6
               SEL RN L6

     FILE 'REGISTRY' ENTERED AT 12:01:44 ON 02 JUN 2003
L8            60 S E1-E60
L9             2 S L8 AND PMS/CI
L10           18 S (ADENOSINE OR AZACYTIDINE OR CLADRIBINE OR DOXIFLURIDINE OR E
L11           13 S (CYTARABINE OR ACYCLOVIR OR VALACYCLOVIR OR PENCICLOVIR OR FA
L12           31 S L10,L11
L13           28 S L8 NOT L9,L12
L14            8 S L13 AND OC4/ES
L15            6 S L13 AND SQL/FA
L16           14 S L13 NOT L14,L15
L17            2 S L16 AND NR>=5
L18            7 S 373645-97-7 OR 373645-98-8 OR 374576-35-9 OR 374576-36-0 OR 3
L19           38 S L12,L18
L20           23 S L8 NOT L19

     FILE 'HCAPLUS' ENTERED AT 12:22:52 ON 02 JUN 2003

     FILE 'HCAPLUS' ENTERED AT 12:23:20 ON 02 JUN 2003

     FILE 'REGISTRY' ENTERED AT 12:23:50 ON 02 JUN 2003
L21           39 S L15,L19

     FILE 'HCAPLUS' ENTERED AT 12:23:54 ON 02 JUN 2003
L22        42441 S L21
L23         2475 S L22 AND ?POLYM?
L24           63 S L22 AND POLYM?/SC,SX
L25         2485 S L23,L24
L26           96 S L21/P AND L25
L27          166 S L21/D AND L25
L28           53 S L21/DP AND L25
L29          209 S L26-L28
L30          263 S L22 (L) ?CONJUGAT?
L31           33 S L29 AND L30
L32            4 S L1-L7 AND L22

     FILE 'REGISTRY' ENTERED AT 12:26:26 ON 02 JUN 2003
L33            1 S 373645-92-2
L34           40 S L21,L33

     FILE 'HCAPLUS' ENTERED AT 12:27:40 ON 02 JUN 2003
L35        42441 S L34
L36            4 S L35 AND L32
L37            1 S L36 AND 63/SC,SX
L38         2657 S L34/P OR L34/D OR L34/DP
```

```
L39         209 S L38 AND L25
L40          55 S L39 AND ?CONJUGAT? NOT L32,L36
L41          46 S L40 AND (1 OR 63)/SC,SX
L42        9223 S L34 (L) THU/RL
L43       10645 S L34 (L) (PAC OR PKT OR BAC)/RL
L44          69 S L42,L43 AND L39
L45          34 S L40 AND L44
L46          48 S L41,L45 NOT L36
L47          28 S L46 AND POLYM?/CW
L48           4 S L46 AND POLYM?/SC,SX
L49          29 S L47,L48
L50          19 S L46 NOT L49
L51          37 S L46 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
L52          25 S L51 AND L49
L53          12 S L51 NOT L52
L54           6 S L52 AND (NUCLEOSIDE? OR POLYNUCLEOTIDE? OR NUCLEOTIDE?)/CW
L55          19 S L52 NOT L54

     FILE 'REGISTRY' ENTERED AT 12:40:41 ON 02 JUN 2003
L56           1 S 30811-80-4
L57          12 S 74-88-4 OR 75-77-4 OR 98-88-4 OR 121-44-8 OR 288-88-0 OR 429-
L58           7 S 82845-99-6 OR 120401-14-1 OR 173099-61-1 OR 373645-93-3 OR 37

     FILE 'HCAPLUS' ENTERED AT 12:43:17 ON 02 JUN 2003
L59        1311 S L56
L60          32 S L59 AND ?CONJUGAT?
L61          32 S L60 AND (PY<=20000509 OR PRD<=20000509 OR AD<=20000509)
L62          32 S L61 NOT L46-L55
                SEL DN AN 5 15
L63           2 S L62 AND E61-E66
L64           2 S L6,L37,L63 AND L1-L7,L22-L32,L35-L55,L59-L63
L65       43716 S L22,L35,L59
L66         362 S L57,L58 AND L65
L67         267 S (L57 OR L58)(L)(RCT OR RACT OR RGT)/RL AND L65
L68          27 S L67 AND ?CONJUGAT?
L69          45 S L67 AND ?POLYM?
L70          13 S L68 AND L69
L71          12 S L70 NOT L64
L72         967 S L65 AND (PRODRUG? OR PRO DRUG?)
L73          86 S L72 AND ?POLYM?
L74          10 S L72 AND POLYM?/SC,SX
L75          84 S L73,L74 AND (1 OR 63)/SC,SX
L76          34 S L75 AND ?CONJUGAT?
L77          19 S L76 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
                SEL DN AN 9
L78           1 S E67-E69
L79           3 S L64,L78
L80           4 S L65 AND (A61K031-7125 OR A61K031-7115 OR A61K031-712)/IC,ICM,
L81         191 S L65 AND C07H021/IC,ICM,ICS
L82          51 S L81 AND ?POLYM?
L83           3 S L81 AND POLYM?/SC,SX
L84          40 S L82,L83 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
L85          12 S L84 AND (PHOSPHODIESTER? OR PHOSPHOROTHIO? OR PHOSPHONATE OR
L86           7 S L85 AND (1 OR 63)/SC,SX
L87           5 S L86 AND ?CONJUGAT?
L88           7 S L79,L87 AND L1-L7,L22-L32,L35-L55,L59-L87
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 13:07:13 ON 02 JUN 2003
L89          59 S E70-E128
L90          40 S L89 AND L34,L56

=> fil reg
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FILE 'REGISTRY' ENTERED AT 13:07:46 ON 02 JUN 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2
DICTIONARY FILE UPDATES: 1 JUN 2003 HIGHEST RN 523977-56-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l90 ide can tot

L90 ANSWER 1 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **374584-54-0** REGISTRY
CN RNA, (aC-aC-aC-Cm-sp-Cm-sp-aC-aC-aC-Cm-sp-Cm-sp-aC-aC-aC-Cm-sp-Cm-sp-dC)
(9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 2 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **374576-38-2** REGISTRY
CN RNA, (aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-aCm-dC)
(9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 3 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **374576-37-1** REGISTRY
CN RNA, (aC-aC-aC-aCm-aCm-aC-aC-aC-aCm-aCm-aC-aC-aC-aCm-aCm-dC) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 4 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **374576-36-0** REGISTRY
CN RNA, (aC-aC-aC-Cm-Cm-aC-aC-aC-Cm-Cm-aC-aC-aC-Cm-Cm) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 5 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **374576-35-9** REGISTRY
CN RNA, (aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-aC-dC) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

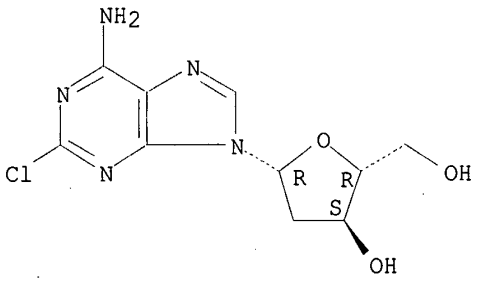
L90 ANSWER 6 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **373645-98-8** REGISTRY
CN Adenosine, 2-chloro-2'-deoxy-, homopolymer (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF (C10 H12 Cl N5 O3)x
CI PMS
PCT Polyamine, Polyamine formed

SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 4291-63-8
CMF C10 H12 Cl N5 O3

Absolute stereochemistry.

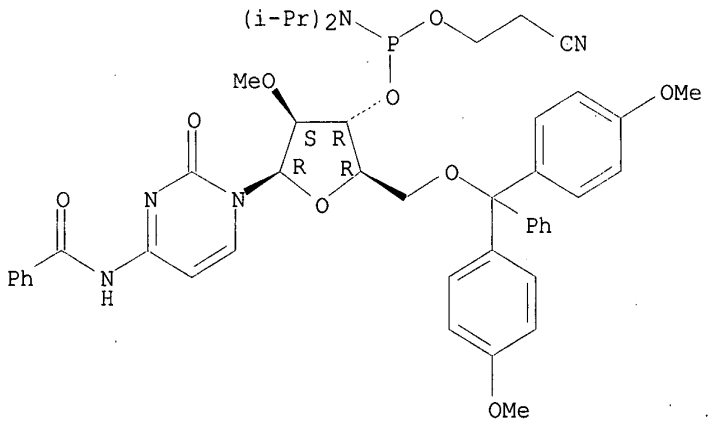


1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 7 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **373645-97-7** REGISTRY
CN Benzamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-O-methyl-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C47 H54 N5 O9 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



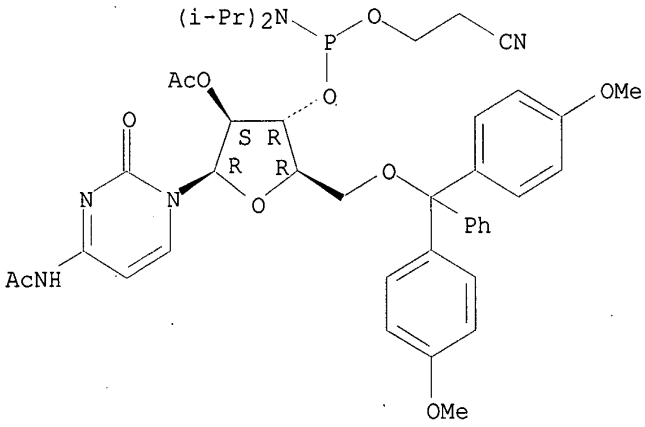
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 8 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **373645-92-2** REGISTRY
CN Acetamide, N-[1-[2-O-acetyl-5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C43 H52 N5 O10 P
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



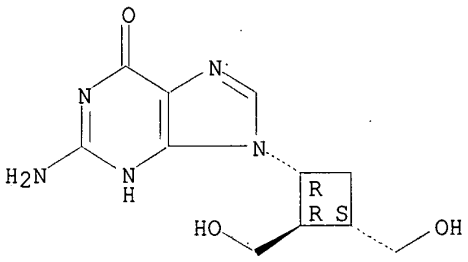
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L90 ANSWER 9 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **127759-89-1** REGISTRY
CN 6H-Purin-6-one, 2-amino-9-[(1R,2R,3S)-2,3-bis(hydroxymethyl)cyclobutyl]-1,9-dihydro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Purin-6-one, 2-amino-9-[2,3-bis(hydroxymethyl)cyclobutyl]-1,9-dihydro-, [1R-(1.alpha.,2.beta.,3.alpha.)]-
OTHER NAMES:
CN (+)-Cyclobut G
CN BMS 180194
CN **Lobucavir**
CN SQ 34514
FS STEREOSEARCH
MF C11 H15 N5 O3
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMINFORMRX, CIN, DDFU, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

95 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
95 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:238191

REFERENCE 2: 138:14152

REFERENCE 3: 138:14074

REFERENCE 4: 137:294979

REFERENCE 5: 137:232453

REFERENCE 6: 137:210932

REFERENCE 7: 137:185764

REFERENCE 8: 137:179859

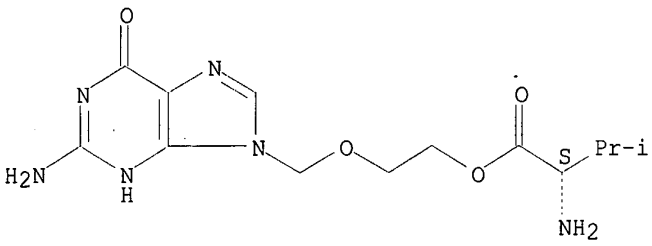
REFERENCE 9: 137:137271

REFERENCE 10: 137:119638

L90 ANSWER 10 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **124832-26-4** REGISTRY
CN L-Valine, 2-[(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)methoxy]ethyl ester (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 256U87
CN L-Valine ester with 9-[(2-hydroxyethoxy)methyl]guanine
CN Valaciclovir
CN ValACV
CN **Valacyclovir**
FS STEREOSEARCH
MF C13 H20 N6 O4
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MRCK*, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

234 REFERENCES IN FILE CA (1957 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
235 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:343864

REFERENCE 2: 138:343637

REFERENCE 3: 138:326425

REFERENCE 4: 138:321289

REFERENCE 5: 138:297636

REFERENCE 6: 138:297618

REFERENCE 7: 138:280782

REFERENCE 8: 138:260488

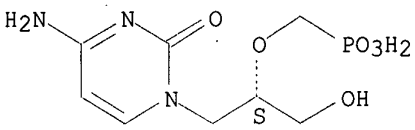
REFERENCE 9: 138:260436

REFERENCE 10: 138:238180

L90 ANSWER 11 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **113852-37-2** REGISTRY
CN Phosphonic acid, [[(1S)-2-(4-amino-2-oxo-1(2H)-pyrimidinyl)-1-(hydroxymethyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phosphonic acid, [[2-(4-amino-2-oxo-1(2H)-pyrimidinyl)-1-(hydroxymethyl)ethoxy]methyl]-, (S)-
OTHER NAMES:
CN (S)-1-(3-hydroxy-2-phosphonomethoxypropyl)cytosine
CN (S)-HPMPC
CN 1-(S)-(3-Hydroxy-2-phosphonylmethoxypropyl)cytosine
CN 1-[(S)-3-Hydroxy-2-(phosphonomethoxy)propyl]cytosine
CN **Cidofovir**
CN GS 0504
CN HPMPC
CN Vistide
FS STEREOSEARCH
MF C8 H14 N3 O6 P
CI COM

SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, MSDS-OHS, PHAR, PHARMASEARCH, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

381 REFERENCES IN FILE CA (1957 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
381 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:343867

REFERENCE 2: 138:343613

REFERENCE 3: 138:331723

REFERENCE 4: 138:331267

REFERENCE 5: 138:331232

REFERENCE 6: 138:326557

REFERENCE 7: 138:321287

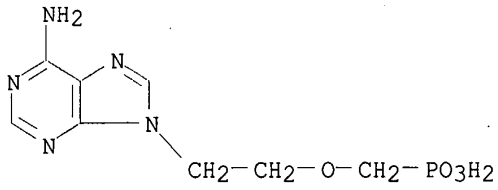
REFERENCE 8: 138:313962

REFERENCE 9: 138:313621

REFERENCE 10: 138:297162

L90 ANSWER 12 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **106941-25-7** REGISTRY
CN Phosphonic acid, [[2-(6-amino-9H-purin-9-yl)ethoxy]methyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9-(2-Phosphonylmethoxyethyl)adenine
CN 9-[2-(Phosphonomethoxy)ethyl]adenine
CN **Adefovir**
CN GS 0393
CN PMEA
FS 3D CONCORD
MF C8 H12 N5 O4 P
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CIN, CSCHEM, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE,

MRCK*, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

387 REFERENCES IN FILE CA (1957 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
386 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:348314

REFERENCE 2: 138:331233

REFERENCE 3: 138:326557

REFERENCE 4: 138:297033

REFERENCE 5: 138:214905

REFERENCE 6: 138:198339

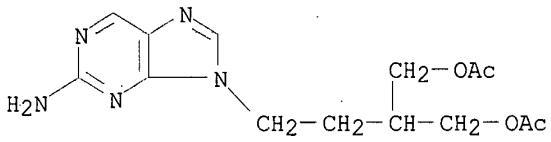
REFERENCE 7: 138:198167

REFERENCE 8: 138:89917

REFERENCE 9: 138:66161

REFERENCE 10: 138:1537

L90 ANSWER 13 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **104227-87-4** REGISTRY
CN 1,3-Propanediol, 2-[2-(2-amino-9H-purin-9-yl)ethyl]-, diacetate (ester) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BRL 42810
CN **Famciclovir**
CN Famvir
CN FCV
FS 3D CONCORD
MF C14 H19 N5 O4
CI COM
SR CA
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

331 REFERENCES IN FILE CA (1957 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
331 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:348314

REFERENCE 2: 138:343889

REFERENCE 3: 138:302633

REFERENCE 4: 138:297647

REFERENCE 5: 138:297618

REFERENCE 6: 138:292806

REFERENCE 7: 138:280754

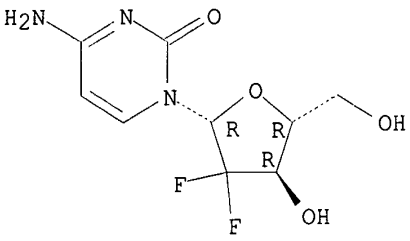
REFERENCE 8: 138:260488

REFERENCE 9: 138:236912

REFERENCE 10: 138:234472

L90 ANSWER 14 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **95058-81-4** REGISTRY
CN Cytidine, 2'-deoxy-2',2'-difluoro- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2',2'-Difluoro-2'-deoxycytidine
CN 2',2'-Difluorodeoxycytidine
CN 2'-Deoxy-2',2'-difluorocytidine
CN DDFC
CN DFdC
CN DFdCyd
CN **Gemcitabine**
CN LY 188011
CN NSC 613327
FS STEREOSEARCH
MF C9 H11 F2 N3 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, IPA, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1128 REFERENCES IN FILE CA (1957 TO DATE)
24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1138 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:348669

REFERENCE 2: 138:348417

REFERENCE 3: 138:348383

REFERENCE 4: 138:348361

REFERENCE 5: 138:348234

REFERENCE 6: 138:348127

REFERENCE 7: 138:343889

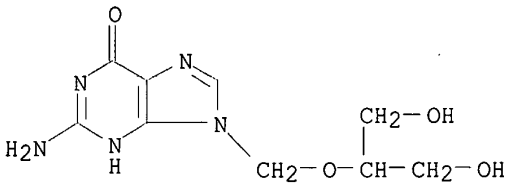
REFERENCE 8: 138:343864

REFERENCE 9: 138:331318

REFERENCE 10: 138:331280

L90 ANSWER 15 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **82410-32-0** REGISTRY
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2'-NDG
CN 2'-Nor-2'-deoxyguanosine
CN 9-(1,3-Dihydroxy-2-propoxymethyl)guanine
CN Biolf 62
CN BW 759
CN BW 759U
CN BW-B 759U
CN DHPG
CN **Ganciclovir**
CN Gancyclovir
CN HHEMG
CN Hydroxyacyclovir
CN RS 21592
CN Vitrasert
FS 3D CONCORD
DR 96551-29-0, 86357-12-2, 106931-35-5
MF C9 H13 N5 O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,

BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2127 REFERENCES IN FILE CA (1957 TO DATE)
58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2133 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:358420

REFERENCE 2: 138:352055

REFERENCE 3: 138:348691

REFERENCE 4: 138:348379

REFERENCE 5: 138:348368

REFERENCE 6: 138:348265

REFERENCE 7: 138:343894

REFERENCE 8: 138:343889

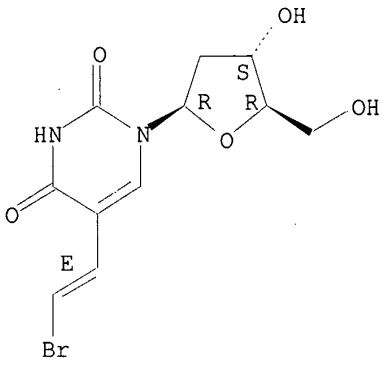
REFERENCE 9: 138:343864

REFERENCE 10: 138:331723

L90 ANSWER 16 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **69304-47-8** REGISTRY
CN Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 5-(2-bromoethenyl)-2'-deoxy-, (E)-
OTHER NAMES:
CN (E)-5-(2-Bromovinyl)-2'-deoxyuridine
CN (E)-5-(2-Bromovinyl)deoxyuridine
CN (E)-5-O-(2-bromoethenyl)-2'-deoxyuridine
CN 5-[(E)-2-Bromoethenyl]-2'-deoxyuridine
CN **Brivudine**
CN BVDU
CN Helpin
FS STEREOSEARCH
DR 102040-00-6, 155203-57-9, 286419-83-8
MF C11 H13 Br N2 O5
CI COM
LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS,

CHEMINFORMRX, CIN, CSCHEM, DDFU, DRUGPAT, DRUGU, EMBASE, IPA, MEDLINE, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

447 REFERENCES IN FILE CA (1957 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
447 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:133727

REFERENCE 2: 138:89816

REFERENCE 3: 138:4775

REFERENCE 4: 137:362546

REFERENCE 5: 137:348310

REFERENCE 6: 137:304284

REFERENCE 7: 137:295185

REFERENCE 8: 137:237585

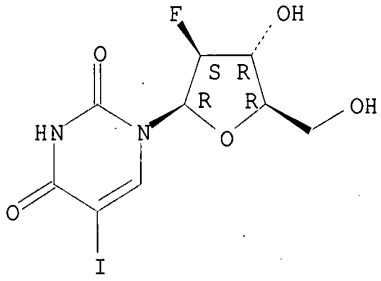
REFERENCE 9: 137:210932

REFERENCE 10: 137:210903

L90 ANSWER 17 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **69123-98-4** REGISTRY
CN 2,4(1H,3H)-Pyrimidinedione, 1-(2-deoxy-2-fluoro-.beta.-D-arabinofuranosyl)-5-iodo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2'-Deoxy-2'-fluoro-.beta.-D-arabinofuranosyl)-5-iodouracil
CN 1-(2-Deoxy-2-fluoro-.beta.-D-arabinofuranosyl)-5-iodouracil
CN 5-Iodo-2'-fluoroarauracil
CN **Fialuridine**
CN FIAU

CN Fluoroiodoarauracil
FS STEREOSEARCH
DR 129049-36-1
MF C9 H10 F I N2 O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CIN, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

167 REFERENCES IN FILE CA (1957 TO DATE)
13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
167 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:34003

REFERENCE 2: 138:14152

REFERENCE 3: 137:137271

REFERENCE 4: 137:135066

REFERENCE 5: 137:134473

REFERENCE 6: 137:88442

REFERENCE 7: 136:330427

REFERENCE 8: 136:212894

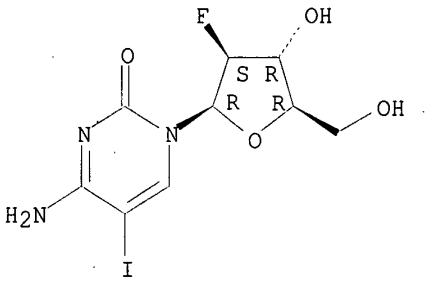
REFERENCE 9: 136:144720

REFERENCE 10: 136:64094

L90 ANSWER 18 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **69123-90-6** REGISTRY
CN 2(1H)-Pyrimidinone, 4-amino-1-(2-deoxy-2-fluoro-.beta.-D-arabinofuranosyl)-5-iodo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2-Deoxy-2-fluoro-.beta.-D-arabinofuranosyl)-5-iodocytosine
CN 1-.beta.-D-2'-Fluoroarabino-5-iodocytosine
CN 2'-Fluoro-5-iodo-1-.beta.-D-arabinofuranosylcytosine

CN FIAC
CN **Fiacitabine**
CN FOAC
FS STEREOSEARCH
MF C9 H11 F I N3 O4
CI COM
LC STN Files: ADISINSIGHT, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CIN, DDFU, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

137 REFERENCES IN FILE CA (1957 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
137 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:88442

REFERENCE 2: 137:88400

REFERENCE 3: 136:64094

REFERENCE 4: 136:34011

REFERENCE 5: 135:376707

REFERENCE 6: 135:175348

REFERENCE 7: 135:51041

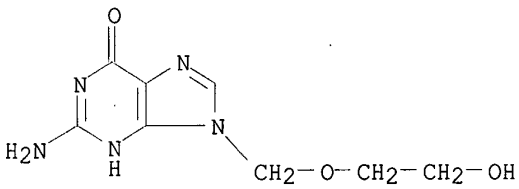
REFERENCE 8: 134:141721

REFERENCE 9: 133:172150

REFERENCE 10: 131:356087

L90 ANSWER 19 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **59277-89-3** REGISTRY
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[(2-hydroxyethoxy)methyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9-(2-Hydroxyethoxymethyl)guanine

CN Acicloftal
CN Aciclovir
CN ACV
CN Acyclo V
CN Acycloguanosine
CN **Acyclovir**
CN Avirase
CN BW 248U
CN Cargosil
CN Gerpevir
CN Herpevir
CN Poviral
CN Vipral
CN Virorax
CN Wellcome 248U
CN Zovirax
CN Zyclir
FS 3D CONCORD
MF C8 H11 N5 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2484 REFERENCES IN FILE CA (1957 TO DATE)
116 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2491 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:348318

REFERENCE 2: 138:348317

REFERENCE 3: 138:343894

REFERENCE 4: 138:343889

REFERENCE 5: 138:343637

REFERENCE 6: 138:331723

REFERENCE 7: 138:331267

REFERENCE 8: 138:326561

REFERENCE 9: 138:326558

REFERENCE 10: 138:326547

L90 ANSWER 20 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **58739-96-1** REGISTRY
CN Cytidine, cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')-cytidylyl-(3'.fwdarw.5')- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (rC)15
FS NUCLEIC ACID SEQUENCE
MF C135 H181 N45 O103 P14
CI MAN
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

REFERENCE 2: 112:36368

REFERENCE 3: 108:6339

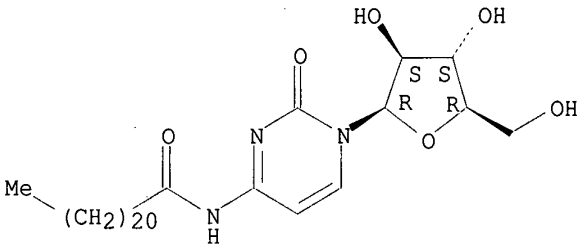
REFERENCE 4: 105:72825

REFERENCE 5: 104:186796

REFERENCE 6: 84:117587

L90 ANSWER 21 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **55726-47-1** REGISTRY
CN Docosanamide, N-(1-.beta.-D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Behenoylcytosine arabinoside
CN BH-AC
CN **Enocitabine**
CN N4-Behenoyl-1-.beta.-D-arabinofuranosylcytosine
CN N4-Behenoylcytosine arabinoside
CN NSC 239336
CN Sunrabin
FS STEREOSEARCH
DR 93974-11-9
MF C31 H55 N3 O6
CI COM
LC STN Files: ADISNEWS, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CIN, DDFU, DRUGPAT, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

107 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
107 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:265631

REFERENCE 2: 138:255514

REFERENCE 3: 138:122864

REFERENCE 4: 138:117384

REFERENCE 5: 138:84853

REFERENCE 6: 137:241597

REFERENCE 7: 137:226252

REFERENCE 8: 137:103498

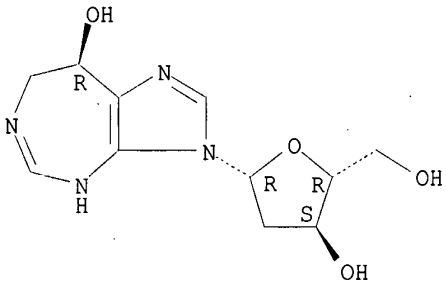
REFERENCE 9: 137:10999

REFERENCE 10: 136:156464

L90 ANSWER 22 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **53910-25-1** REGISTRY
CN Imidazo[4,5-d][1,3]diazepin-8-ol, 3-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-3,4,7,8-tetrahydro-, (8R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Imidazo[4,5-d][1,3]diazepin-8-ol, 3-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-3,4,7,8-tetrahydro-, (R)-
OTHER NAMES:
CN 2'-DCF
CN 2'-Deoxycoformycin
CN 2'-Dexoycoformycin
CN CI 825
CN CL 67310465
CN Cl 825
CN Co-V
CN Co-Vidarabine
CN Deaminase inhibitor
CN Deoxycoformycin
CN Nipent
CN NSC 218321
CN PD-ADI
CN **Pentostatin**

CN Vira A deaminase inhibitor
FS STEREOSEARCH
DR 59979-24-7, 63677-95-2, 69196-00-5, 70865-77-9
MF C11 H16 N4 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CBNB, CHEMLIST, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

617 REFERENCES IN FILE CA (1957 TO DATE)
20 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
618 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:348269

REFERENCE 2: 138:348268

REFERENCE 3: 138:297645

REFERENCE 4: 138:265631

REFERENCE 5: 138:255514

REFERENCE 6: 138:255252

REFERENCE 7: 138:142578

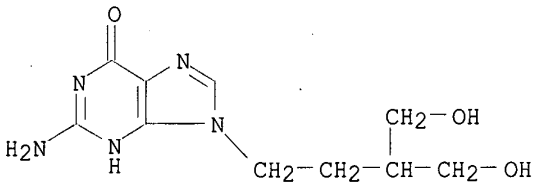
REFERENCE 8: 138:122864

REFERENCE 9: 138:32994

REFERENCE 10: 138:32989

L90 ANSWER 23 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **39809-25-1** REGISTRY
CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[4-hydroxy-3-(hydroxymethyl)butyl]-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9-[4-Hydroxy-3-(hydroxymethyl)butyl]guanine
CN BRL 39123
CN Denavir

CN **Penciclovir**
CN VSA 671
FS 3D CONCORD
DR 111790-02-4
MF C10 H15 N5 O3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

319 REFERENCES IN FILE CA (1957 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
319 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:265219

REFERENCE 2: 138:253701

REFERENCE 3: 138:214997

REFERENCE 4: 138:210299

REFERENCE 5: 138:198171

REFERENCE 6: 138:112396

REFERENCE 7: 138:100908

REFERENCE 8: 138:89816

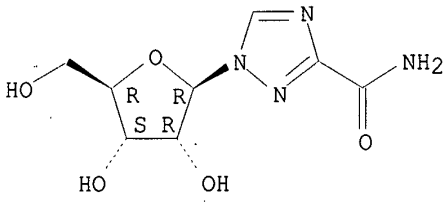
REFERENCE 9: 138:56191

REFERENCE 10: 138:55958

L90 ANSWER 24 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **36791-04-5** REGISTRY
CN 1H-1,2,4-Triazole-3-carboxamide, 1-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-.beta.-D-Ribofuranosyl-1,2,4-triazol-3-carboxyamide
CN 1-.beta.-D-Ribofuranosyl-1,2,4-triazole-3-carboxamide
CN ICN 1229
CN NSC 163039
CN Rebetol
CN Ribamide
CN Ribamidil

CN **Ribavirin**
CN Tribavirin
CN Vilona
CN Viramid
CN Virazole
FS STEREOSEARCH
DR 66510-90-5, 437710-49-1
MF C8 H12 N4 O5
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1569 REFERENCES IN FILE CA (1957 TO DATE)
62 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1577 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:358497

REFERENCE 2: 138:358478

REFERENCE 3: 138:348318

REFERENCE 4: 138:343520

REFERENCE 5: 138:338499

REFERENCE 6: 138:336176

REFERENCE 7: 138:331228

REFERENCE 8: 138:331088

REFERENCE 9: 138:331078

REFERENCE 10: 138:326557

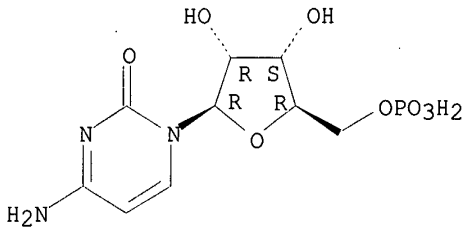
L90 ANSWER 25 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **30811-80-4** REGISTRY
CN 5'-Cytidylic acid, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5'-Cytidylic acid, polymers (8CI)
OTHER NAMES:
CN Poly(5'-cytidylic acid)

CN Poly(C)
CN Poly(CMP)
CN Poly(cytidylic acid)
FS STEREOSEARCH
DR 162756-88-9, 55679-94-2, 25249-24-5
MF (C9 H14 N3 O8 P)x
CI PMS, COM
PCT Polynucleotide
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

CM 1

CRN 63-37-6
CMF C9 H14 N3 O8 P

Absolute stereochemistry.



1181 REFERENCES IN FILE CA (1957 TO DATE)
91 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1181 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:350814

REFERENCE 2: 138:343689

REFERENCE 3: 138:338817

REFERENCE 4: 138:333808

REFERENCE 5: 138:299353

REFERENCE 6: 138:183514

REFERENCE 7: 138:133473

REFERENCE 8: 138:102712

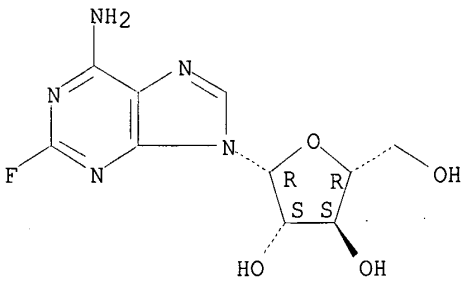
REFERENCE 9: 138:85197

REFERENCE 10: 138:35542

L90 ANSWER 26 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **21679-14-1** REGISTRY
CN 9H-Purin-6-amine, 9-.beta.-D-arabinofuranosyl-2-fluoro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenine, 9-.beta.-D-arabinofuranosyl-2-fluoro- (8CI)
OTHER NAMES:

CN 2-Fluoro Ara-A
CN 2-Fluoro-9-.beta.-D-arabinofuranosyladenine
CN 2-Fluoroadenine arabinoside
CN 9-.beta.-D-Arabinofuranosyl-2-fluoroadenine
CN 9-.beta.-D-Arabinosyl-2-fluoroadenine
CN F-ara-A
CN **Fludarabine**
CN NSC 118218
CN NSC 118218H
FS STEREOSEARCH
MF C10 H12 F N5 O4
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

589 REFERENCES IN FILE CA (1957 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
591 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:352741

REFERENCE 2: 138:348364

REFERENCE 3: 138:314584

REFERENCE 4: 138:297645

REFERENCE 5: 138:297636

REFERENCE 6: 138:280870

REFERENCE 7: 138:234095

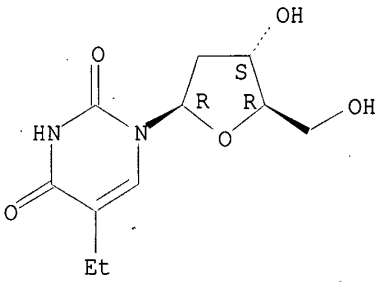
REFERENCE 8: 138:231332

REFERENCE 9: 138:214992

REFERENCE 10: 138:214968

L90 ANSWER 27 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **15176-29-1** REGISTRY
CN Uridine, 2'-deoxy-5-ethyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN .beta.-5-Ethyl-2'-deoxyuridine
CN .beta.-5-Ethyldeoxyuridine
CN 2'-Deoxy-5-ethyluridine
CN 5-Ethyl-1-(2'-deoxy-.beta.-D-ribofuranosyl)uracil
CN 5-Ethyl-2'-deoxyuridine
CN 5-Ethyldeoxyuridine
CN Aedurid
CN **Edoxudine**
CN EDU
CN Epoxudine
CN EUDR
CN ORF 15817
CN RWJ 15817
FS STEREOSEARCH
DR 46895-01-6
MF C11 H16 N2 O5
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PHAR, RTECS*, SPECINFO, TOXCENTER, USAN, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

266 REFERENCES IN FILE CA (1957 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
266 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:210932

REFERENCE 2: 137:88442

REFERENCE 3: 136:272759

REFERENCE 4: 136:217007

REFERENCE 5: 136:64094

REFERENCE 6: 136:17266

REFERENCE 7: 135:376707

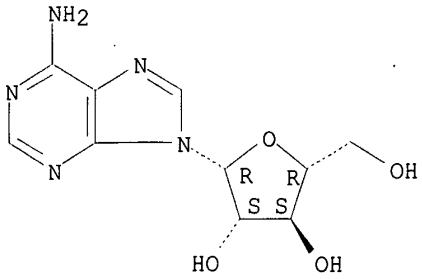
REFERENCE 8: 135:340189

REFERENCE 9: 135:205505

REFERENCE 10: 135:174643

L90 ANSWER 28 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **5536-17-4** REGISTRY
CN 9H-Purin-6-amine, 9-.beta.-D-arabinofuranosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Adenine, 9-.beta.-D-arabinofuranosyl- (7CI, 8CI)
OTHER NAMES:
CN .beta.-Ara-A
CN .beta.-D-Arabinofuranosyladenine
CN .beta.-D-Arabinosyladenine
CN 6-Amino-9-.beta.-D-arabinofuranosylpurine
CN 9-.beta.-D-Arabinoadenosine
CN 9-.beta.-D-Arabinofuranosyl-9H-purin-6-amine
CN 9-.beta.-D-Arabinofuranosyladenine
CN 9-.beta.-D-Arabinosyladenine
CN 9-Arabinosyladenine
CN Adenine .beta.-D-arabinofuranoside
CN Adenine 9-.beta.-D-arabinofuranoside
CN Adenine arabinoside
CN Ara-A
CN Araadenosine
CN Arabinosyladenine
CN Arasena-A
CN CI-673
CN NSC 404241
CN Spongoadenosine
CN Vidarabin
CN **Vidarabine**
CN Vidarabine anhydrous
CN Vira-A
FS STEREOSEARCH
MF C10 H13 N5 O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PHAR, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1316 REFERENCES IN FILE CA (1957 TO DATE)
46 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1316 REFERENCES IN FILE CAPLUS (1957 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:348348

REFERENCE 2: 138:348318

REFERENCE 3: 138:265631

REFERENCE 4: 138:187999

REFERENCE 5: 138:133727

REFERENCE 6: 138:89816

REFERENCE 7: 138:14152

REFERENCE 8: 138:2695

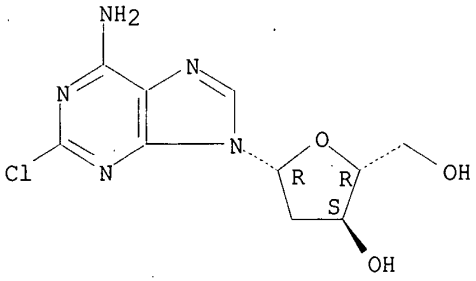
REFERENCE 9: 137:385060

REFERENCE 10: 137:299930

L90 ANSWER 29 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **4291-63-8** REGISTRY
CN Adenosine, 2-chloro-2'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-CdA
CN 2-Chloro-2'-deoxy-.beta.-adenosine
CN 2-Chloro-2'-deoxyadenosine
CN 2-Chloro-6-amino-9-(2-deoxy-.beta.-D-erythro-pentofuranosyl)purine
CN 2-Chlorodeoxyadenosine
CN Cladarabine
CN **Cladribine**
CN CldAdo
CN Leustatin
CN NSC 105014
CN NSC 105014-F
CN RWJ 26251
FS STEREOSEARCH
DR 24757-90-2
MF C10 H12 Cl N5 O3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOBUSINESS,

BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

606 REFERENCES IN FILE CA (1957 TO DATE)
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
610 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:358392

REFERENCE 2: 138:350409

REFERENCE 3: 138:343864

REFERENCE 4: 138:343520

REFERENCE 5: 138:314083

REFERENCE 6: 138:298635

REFERENCE 7: 138:297645

REFERENCE 8: 138:297636

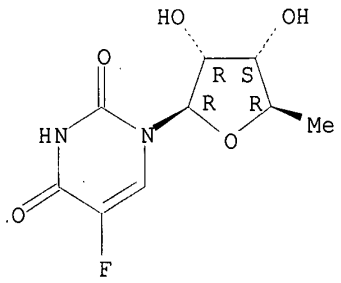
REFERENCE 9: 138:265631

REFERENCE 10: 138:255514

L90 ANSWER 30 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **3094-09-5** REGISTRY
CN Uridine, 5'-deoxy-5-fluoro- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5'-Deoxy-5-fluorouridine
CN 5'-DFUR
CN 5'-dFUrd
CN 5-Fluoro-5'-deoxyuridine
CN 5-Fluorodesoxyuridine
CN **Doxifluridine**
CN Flutron
CN Furtulon

CN Ro 21-9738
FS STEREOSEARCH
MF C9 H11 F N2 O5
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

465 REFERENCES IN FILE CA (1957 TO DATE)
10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
466 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:343894

REFERENCE 2: 138:281090

REFERENCE 3: 138:265631

REFERENCE 4: 138:255514

REFERENCE 5: 138:248068

REFERENCE 6: 138:221778

REFERENCE 7: 138:220082

REFERENCE 8: 138:187722

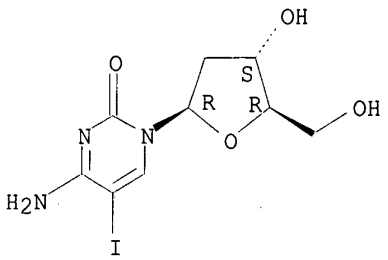
REFERENCE 9: 138:149225

REFERENCE 10: 138:122864

L90 ANSWER 31 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **611-53-0** REGISTRY
CN Cytidine, 2'-deoxy-5-iodo- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2'-Deoxy-5-iodocytidine
CN 5-Iodo-2'-deoxycytidine

CN 5-Iododeoxycytidine
CN **Ibacitabine**
FS STEREOSEARCH
MF C9 H12 I N3 O4
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, PHAR, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

140 REFERENCES IN FILE CA (1957 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
140 REFERENCES IN FILE CAPLUS (1957 TO DATE)
20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:332464

REFERENCE 2: 138:249733

REFERENCE 3: 138:73461

REFERENCE 4: 138:72830

REFERENCE 5: 137:348832

REFERENCE 6: 137:274024

REFERENCE 7: 136:195277

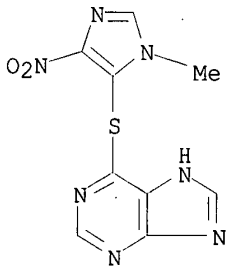
REFERENCE 8: 136:6284

REFERENCE 9: 135:376707

REFERENCE 10: 132:31735

L90 ANSWER 32 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **446-86-6** REGISTRY
CN 1H-Purine, 6-[(1-methyl-4-nitro-1H-imidazol-5-yl)thio]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Purine, 6-[(1-methyl-4-nitroimidazol-5-yl)thio]- (6CI, 8CI)
OTHER NAMES:
CN 6-(1-Methyl-4-nitroimidazol-5-yl)thiopurine
CN 6-(1-Methyl-4-nitromidazol-5-ylthio)purine

CN Azamune
CN Azanin
CN Azathioprin
CN **Azathioprine**
CN Azoran
CN Azothioprine
CN BW 57-322
CN Imuran
CN Imurek
CN Imurel
CN Muran
CN NSC 39084
FS 3D CONCORD
DR 11120-16-4, 6165-04-4, 33609-91-5
MF C9 H7 N7 O2 S
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2192 REFERENCES IN FILE CA (1957 TO DATE)
24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2197 REFERENCES IN FILE CAPLUS (1957 TO DATE)
27 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:348761

REFERENCE 2: 138:348443

REFERENCE 3: 138:348442

REFERENCE 4: 138:348433

REFERENCE 5: 138:348432

REFERENCE 6: 138:348431

REFERENCE 7: 138:348430

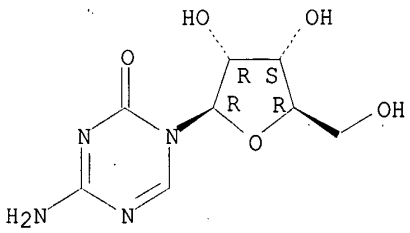
REFERENCE 8: 138:348429

REFERENCE 9: 138:348426

REFERENCE 10: 138:343889

L90 ANSWER 33 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **320-67-2** REGISTRY
CN 1,3,5-Triazin-2(1H)-one, 4-amino-1-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN s-Triazin-2(1H)-one, 4-amino-1-.beta.-D-ribofuranosyl- (8CI)
OTHER NAMES:
CN 5-AC
CN 5-AzaC
CN 5-Azacytidine
CN 5-AZC
CN 5-AZCR
CN Antibiotic U 18496
CN Azacitidine
CN **Azacytidine**
CN Ladakamycin
CN Ledakamycin
CN Mylosar
CN NSC 102816
CN NSC 103-627
CN U 18496
CN WR 183027
FS STEREOSEARCH
DR 52934-49-3, 292869-98-8
MF C8 H12 N4 O5
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1251 REFERENCES IN FILE CA (1957 TO DATE)
22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1253 REFERENCES IN FILE CAPLUS (1957 TO DATE)
19 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:315811

REFERENCE 2: 138:265631

REFERENCE 3: 138:249936

REFERENCE 4: 138:216341

REFERENCE 5: 138:199925

REFERENCE 6: 138:198658

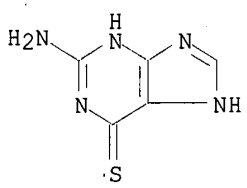
REFERENCE 7: 138:197962

REFERENCE 8: 138:183234

REFERENCE 9: 138:180446

REFERENCE 10: 138:180337

L90 ANSWER 34 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **154-42-7** REGISTRY
CN 6H-Purine-6-thione, 2-amino-1,7-dihydro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Purine-6(1H)-thione, 2,3-dihydro-2-imino- (6CI)
CN Purine-6(1H)-thione, 2-amino- (7CI, 8CI)
CN Purine-6-thiol, 2-amino- (8CI)
OTHER NAMES:
CN 2-Amino-6-mercaptopurine
CN 2-Amino-9H-purine-6(1H)-thione
CN 2-Aminopurine-6-thiol
CN 6-Mercaptoguanine
CN 6-TG
CN 6-Thioguanine
CN Guanine, thio-
CN NSC 752
CN Tabloid
CN **Thioguanine**
CN Tioguanin
CN Tioguanine
FS 3D CONCORD
DR 611-67-6, 1125-65-1, 1832-72-0, 5632-51-9
MF C5 H5 N5 S
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1477 REFERENCES IN FILE CA (1957 TO DATE)
60 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1483 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:331334

REFERENCE 2: 138:330896

REFERENCE 3: 138:297267

REFERENCE 4: 138:297227

REFERENCE 5: 138:297125

REFERENCE 6: 138:265631

REFERENCE 7: 138:265068

REFERENCE 8: 138:255252

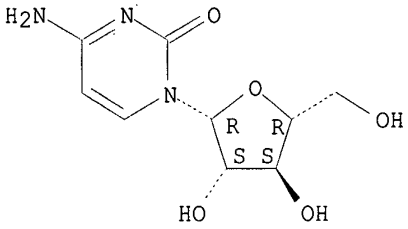
REFERENCE 9: 138:247999

REFERENCE 10: 138:231225

L90 ANSWER 35 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **147-94-4** REGISTRY
CN 2(1H)-Pyrimidinone, 4-amino-1-.beta.-D-arabinofuranosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cytosine, 1-.beta.-D-arabinofuranosyl- (6CI, 8CI)
OTHER NAMES:
CN (Arabinofuranosyl)cytosine
CN 1-(.beta.-D-Arabinofuranosyl)cytosine
CN 1-(Arabinofuranosyl)cytosine
CN 1-.beta.-Arabinofuranosylcytosine
CN 1-.beta.-D-Arabinosylcytosine
CN 4-Amino-1-arabinofuranosyl-2-oxo-1,2-dihydropyrimidine
CN Ac 1075
CN Alexan
CN Ara-C
CN ara-Cytosine
CN Arabinocytosine
CN Arabinoside C
CN Arabitin
CN Aracytidine
CN Aracytin
CN Aracytine
CN Arafcyt
CN CHX 3311
CN Citozar
CN Cyclocide
CN Cytarabin
CN **Cytarabine**
CN Cytarabinoside
CN Cytosar
CN Cytosar U
CN Cytosine .beta.-D-arabinofuranoside
CN Cytosine .beta.-D-arabinoside
CN Cytosine arabinoside
CN Cytosine-1-.beta.-arabinofuranoside
CN Cytosine-1-.beta.-D-arabinofuranoside

CN DepoCyte
CN Erpalfa
CN Iretin
CN NSC 287459
CN NSC 63878
CN Spongocytidine
CN U 19920
CN U 19920A
CN Udicil
FS STEREOSEARCH
MF C9 H13 N3 O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5446 REFERENCES IN FILE CA (1957 TO DATE)
158 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5455 REFERENCES IN FILE CAPLUS (1957 TO DATE)
30 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:352761

REFERENCE 2: 138:352512

REFERENCE 3: 138:351978

REFERENCE 4: 138:350409

REFERENCE 5: 138:349264

REFERENCE 6: 138:348760

REFERENCE 7: 138:348348

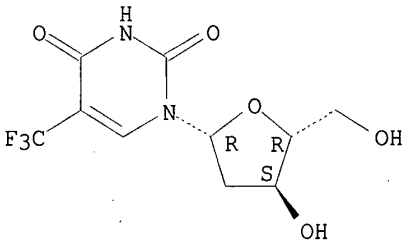
REFERENCE 8: 138:335273

REFERENCE 9: 138:331328

REFERENCE 10: 138:331288

L90 ANSWER 36 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **70-00-8** REGISTRY
CN Thymidine, .alpha.,.alpha.,.alpha.-trifluoro- (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Uridine, 2'-deoxy-5-(trifluoromethyl)- (7CI)
OTHER NAMES:
CN 2'-Deoxy-5-(trifluoromethyl)uridine
CN 5-(Trifluoromethyl)-2'-deoxyuridine
CN 5-(Trifluoromethyl)deoxyuridine
CN 5-Trifluoromethyl-2'-deoxy-.beta.-uridine
CN 5-Trifluorothymidine
CN Trifluorothymidine
CN **Trifluridine**
CN Viroptic
FS STEREOSEARCH
MF C10 H11 F3 N2 O5
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

422 REFERENCES IN FILE CA (1957 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
422 REFERENCES IN FILE CAPLUS (1957 TO DATE)
17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:348318

REFERENCE 2: 138:266841

REFERENCE 3: 137:358127

REFERENCE 4: 137:316092

REFERENCE 5: 137:311145

REFERENCE 6: 137:232837

REFERENCE 7: 137:210932

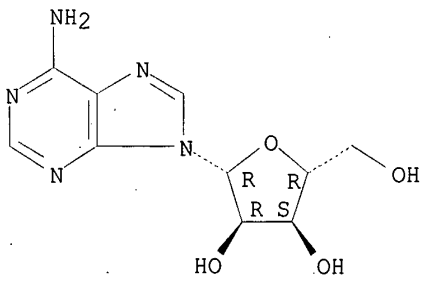
REFERENCE 8: 137:179859

REFERENCE 9: 137:163349

REFERENCE 10: 137:121705

L90 ANSWER 37 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **58-61-7** REGISTRY
CN **Adenosine (8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN .beta.-Adenosine
CN .beta.-D-Adenosine
CN .beta.-D-Ribofuranose, 1-(6-amino-9H-purin-9-yl)-1-deoxy-
CN .beta.-D-Ribofuranoside, adenine-9
CN 9-.beta.-D-Ribofuranosyl-9H-purin-6-amine
CN 9-.beta.-D-Ribofuranosyladenine
CN 9H-Purin-6-amine, 9-.beta.-D-ribofuranosyl-
CN A
CN Adenine riboside
CN Adenocard
CN Adenocor
CN Adenoscan
CN Adrekar
CN Boniton
CN D-Adenosine
CN Myocol
CN Nucleocardyl
CN Riboadenosine
CN Sandesin
FS STEREOSEARCH
DR 46946-45-6, 46969-16-8
MF C10 H13 N5 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGNL, DRUGU, DRUGUPDATES, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18390 REFERENCES IN FILE CA (1957 TO DATE)
955 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18399 REFERENCES IN FILE CAPLUS (1957 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:358567

REFERENCE 2: 138:358533

REFERENCE 3: 138:353252

REFERENCE 4: 138:351581

REFERENCE 5: 138:351570

REFERENCE 6: 138:351395

REFERENCE 7: 138:350882

REFERENCE 8: 138:350312

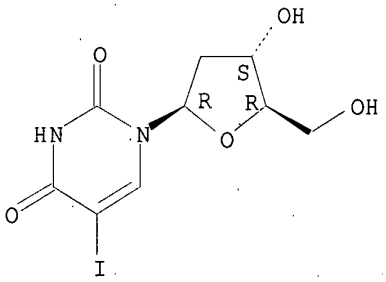
REFERENCE 9: 138:349353

REFERENCE 10: 138:348965

L90 ANSWER 38 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **54-42-2** REGISTRY
CN Uridine, 2'-deoxy-5-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2-Deoxy-.beta.-D-ribofuranosyl)-5-iodouracil
CN 2'-Deoxy-5-iodouridine
CN 5-Iodo-2'-deoxyuridine
CN 5-Iodo-2'-desoxyuridine
CN 5-Iododeoxyuridine
CN 5-Iodouracil deoxyriboside
CN 5IUDR
CN Allergan 211
CN Dendrid
CN Emanil
CN Herpe-Gel
CN Herpesil
CN Herpidu
CN Herplex
CN Idexur
CN Idoxene
CN Idoxuridin
CN **Idoxuridine**
CN IDU
CN Idu Oculos
CN Iducher
CN Idulea
CN IDUR
CN Iduridin
CN Iododeoxyuridine
CN IUDR
CN Joddeoxiuridin
CN Kerecid
CN NSC 39661
CN Ophthalmadine
CN SKF 14287
CN Stoxil
CN Synmiol
CN Virudox

FS STEREOSEARCH
DR 888-04-0, 1336-77-2
MF C9 H11 I N2 O5
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1647 REFERENCES IN FILE CA (1957 TO DATE)
37 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1649 REFERENCES IN FILE CAPLUS (1957 TO DATE)
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:333586

REFERENCE 2: 138:321478

REFERENCE 3: 138:287893

REFERENCE 4: 138:282897

REFERENCE 5: 138:250735

REFERENCE 6: 138:249733

REFERENCE 7: 138:234118

REFERENCE 8: 138:217368

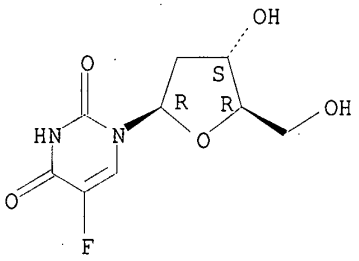
REFERENCE 9: 138:205306

REFERENCE 10: 138:183186

L90 ANSWER 39 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **50-91-9** REGISTRY
CN Uridine, 2'-deoxy-5-fluoro- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2-Deoxy-.beta.-D-ribofuranosyl)-5-fluorouracil
CN 2'-Deoxy-5-fluorouridine

CN 5-Fluoro-2'-deoxy-.beta.-uridine
CN 5-Fluoro-2'-deoxyuridine
CN 5-Fluorodeoxyuridine
CN 5-Fluorouracil 2'-deoxyriboside
CN 5-Fluorouracil deoxyriboside
CN FdUrd
CN Floxuridin
CN **Floxuridine**
CN FUDR
CN NSC 26740
CN NSC 27640
FS STEREOSEARCH
DR 888-03-9, 3460-74-0
MF C9 H11 F N2 O5
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2079 REFERENCES IN FILE CA (1957 TO DATE)
62 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2083 REFERENCES IN FILE CAPLUS (1957 TO DATE)
34 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:338381

REFERENCE 2: 138:314045

REFERENCE 3: 138:298635

REFERENCE 4: 138:292791

REFERENCE 5: 138:287893

REFERENCE 6: 138:282662

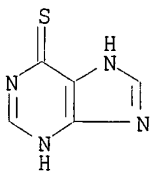
REFERENCE 7: 138:280603

REFERENCE 8: 138:265631

REFERENCE 9: 138:255252

REFERENCE 10: 138:248003

L90 ANSWER 40 OF 40 REGISTRY COPYRIGHT 2003 ACS
RN **50-44-2** REGISTRY
CN 6H-Purine-6-thione, 1,7-dihydro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Purine-6(1H)-thione (7CI)
CN Purine-6-thiol (8CI)
OTHER NAMES:
CN 1,7-Dihydro-6H-purine-6-thione
CN 1H-Purine, 6-mercapto-
CN 3H-Purine-6-thiol
CN 6-Mercaptopurin
CN 6-Mercaptopurine
CN 6-MP
CN 6-Thiohypoxanthine
CN 6-Thiopurine
CN 6-Thioxopurine
CN 6MP
CN 7-Mercapto-1,3,4,6-tetrazaindene
CN 9H-Purine-6(1H)-thione
CN Hypoxanthine, thio-
CN Ismipur
CN Leukerin
CN Leupurin
CN Mercaleukim
CN Mercaleukin
CN **Mercaptopurine**
CN Mercapurin
CN Mern
CN NSC 755
CN Purimethol
CN Purine-6-thione
CN Purinethiol
CN Purinethol
CN Thiohypoxanthine
CN U 4748
FS 3D CONCORD
DR 5759-99-9, 5818-33-7, 5818-60-0, 39454-94-9
MF C5 H4 N4 S
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3295 REFERENCES IN FILE CA (1957 TO DATE)
116 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3301 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:348175

REFERENCE 2: 138:343605

REFERENCE 3: 138:335273

REFERENCE 4: 138:330896

REFERENCE 5: 138:321276

REFERENCE 6: 138:321219

REFERENCE 7: 138:319392

REFERENCE 8: 138:313951

REFERENCE 9: 138:297268

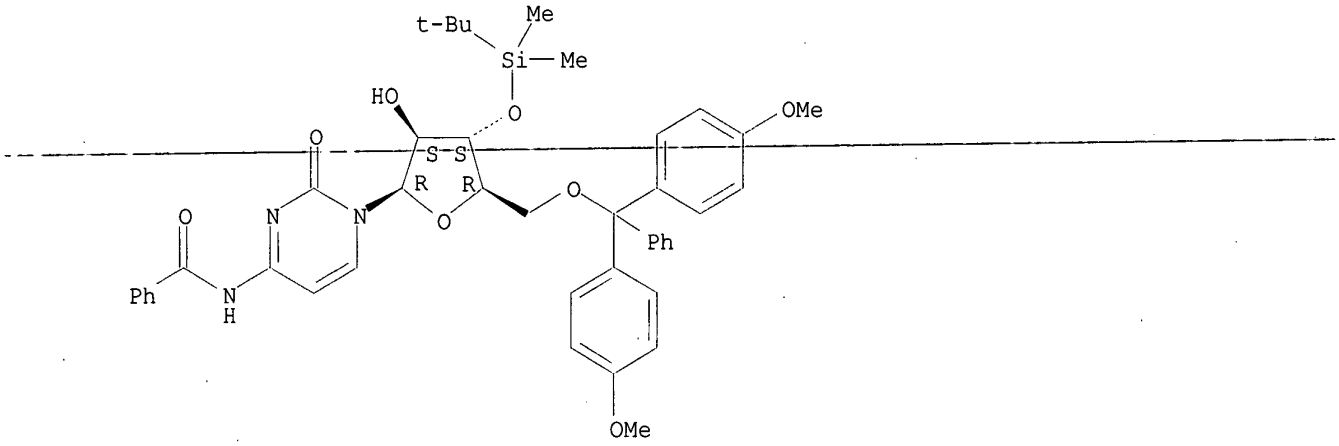
REFERENCE 10: 138:297267

=> s l89 not l90
L91 19 L89 NOT L90

=> d ide can tot

L91 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **373645-96-6** REGISTRY
CN Benzamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C43 H49 N3 O8 Si
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



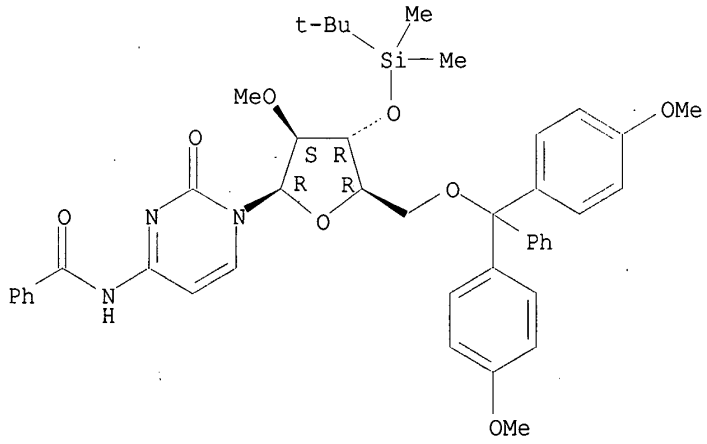
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L91 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **373645-95-5** REGISTRY
CN Benzamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-methyl-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C44 H51 N3 O8 Si
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

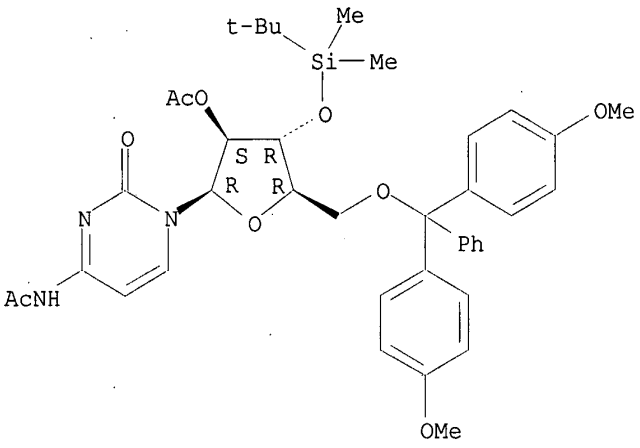
1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L91 ANSWER 3 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **373645-94-4** REGISTRY
CN Acetamide, N-[1-[2-O-acetyl-5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C40 H49 N3 O9 Si
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



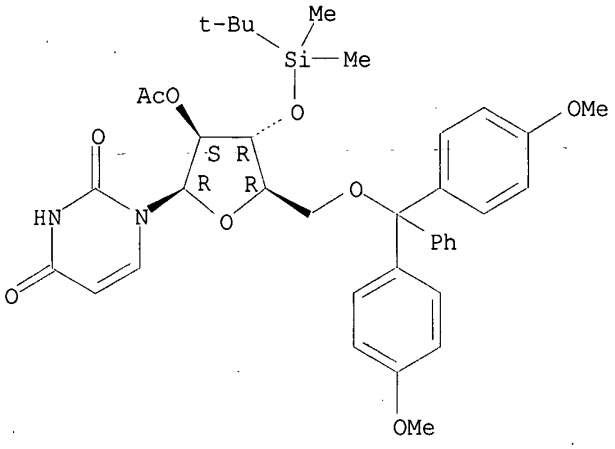
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L91 ANSWER 4 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **373645-93-3** REGISTRY
CN 2,4(1H,3H)-Pyrimidinedione, 1-[2-O-acetyl-5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-arabinofuranosyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H46 N2 O9 Si
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



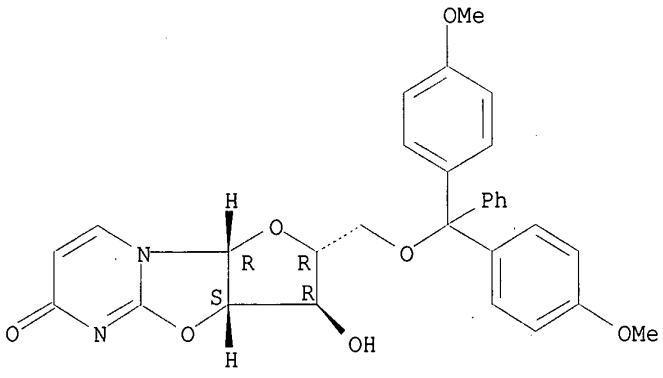
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

L91 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **173170-12-2** REGISTRY
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2,3,3a,9a-tetrahydro-3-hydroxy-, (2R,3R,3aS,9aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-2,3,3a,9a-tetrahydro-3-hydroxy-, [2R-(2.alpha.,3.beta.,3a.beta.,9a.beta.)]-
FS STEREOSEARCH
MF C30 H28 N2 O7
SR CA
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

15 REFERENCES IN FILE CA (1957 TO DATE)
15 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:279421

REFERENCE 2: 136:184049

REFERENCE 3: 136:147302

REFERENCE 4: 135:376707

REFERENCE 5: 133:89747

REFERENCE 6: 133:4895

REFERENCE 7: 130:110511

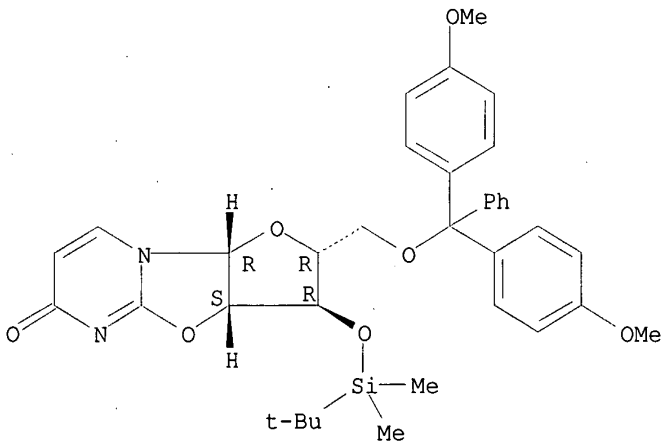
REFERENCE 8: 129:136439

REFERENCE 9: 128:3847

REFERENCE 10: 126:131733

L91 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **173099-61-1** REGISTRY
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3,3a,9a-tetrahydro-, (2R,3R,3aS,9aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2-[[bis(4-methoxyphenyl)phenylmethoxy]methyl]-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3,3a,9a-tetrahydro-, [2R-(2.alpha.,3.beta.,3a.beta.,9a.beta.)]-
FS STEREOSEARCH
MF C36 H42 N2 O7 Si
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:279421

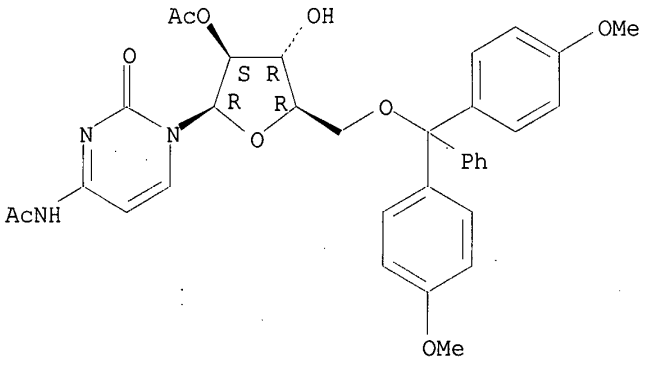
REFERENCE 2: 136:147302

REFERENCE 3: 135:376707

REFERENCE 4: 124:196860

L91 ANSWER 7 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **120401-14-1** REGISTRY
CN Acetamide, N-[1-[2-O-acetyl-5-O-[bis(4-methoxyphenyl)phenylmethyl]-.beta.-D-arabinofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C34 H35 N3 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

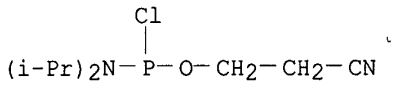
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

REFERENCE 2: 110:213269

L91 ANSWER 8 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **89992-70-1** REGISTRY
CN Phosphoramidochloridous acid, bis(1-methylethyl)-, 2-cyanoethyl ester (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (2-Cyanoethoxy)(diisopropylamino)chlorophosphane
CN .beta.-Cyanoethyl N,N-diisopropylamidochlorophosphite
CN 2-Cyanoethyl N,N-diisopropylchlorophosphoramidite
CN Chloro(.beta.-cyanoethoxy)(diisopropylamino)phosphine
CN Chloro(2-cyanoethoxy)(diisopropylamino)phosphine
CN Chloro(diisopropylamino)-.beta.-cyanoethoxyphosphine
FS 3D CONCORD
DR 124482-92-4, 146026-68-8
MF C9 H18 Cl N2 O P

LC STN Files: BEILSTEIN*, BIOBUSINESS, CA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CSCHEM, MSDS-OHS, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

712 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
712 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:339694

REFERENCE 2: 138:334058

REFERENCE 3: 138:299672

REFERENCE 4: 138:287951

REFERENCE 5: 138:283016

REFERENCE 6: 138:267326

REFERENCE 7: 138:256581

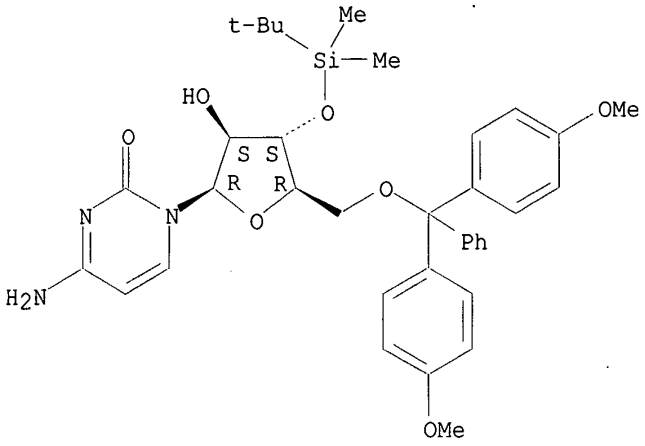
REFERENCE 8: 138:255457

REFERENCE 9: 138:216973

REFERENCE 10: 138:199930

L91 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **82845-99-6** REGISTRY
CN 2(1H)-Pyrimidinone, 4-amino-1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-arabinofuranosyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C36 H45 N3 O7 Si
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

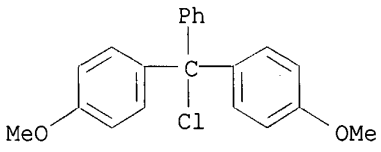
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:376707

REFERENCE 2: 99:158766

REFERENCE 3: 97:110333

L91 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **40615-36-9** REGISTRY
CN Benzene, 1,1'-(chlorophenylmethylene)bis[4-methoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4,4'-Dimethoxytriphenylmethyl chloride
CN 4,4'-Dimethoxytrityl chloride
CN Bis(4-methoxyphenyl)phenylmethyl chloride
CN Chlorobis(4-methoxyphenyl)phenylmethane
MF C21 H19 Cl O2
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

813 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
817 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:350275

REFERENCE 2: 138:349579

REFERENCE 3: 138:348750

REFERENCE 4: 138:348705

REFERENCE 5: 138:337749

REFERENCE 6: 138:331731

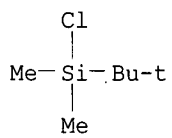
REFERENCE 7: 138:314625

REFERENCE 8: 138:314614

REFERENCE 9: 138:314559

REFERENCE 10: 138:314558

L91 ANSWER 11 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **18162-48-6** REGISTRY
CN Silane, chloro(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Silane, chloro-tert-butyldimethyl- (8CI)
OTHER NAMES:
CN (1,1-Dimethylethyl)dimethylsilyl chloride
CN Chloro-tert-butyldimethylsilane
CN Chlorodimethyl-tert-butylsilane
CN Dimethyl(1,1-dimethylethyl)chlorosilane
CN Dimethyl-tert-butylchlorosilane
CN Dimethyl-tert-butylsilyl chloride
CN t-Butyldimethylchlorosilane
CN TBDMS chloride
CN TBDMS-Cl
CN tert-Butylchlorodimethylsilane
CN tert-Butyldimethylchlorosilane
CN tert-Butyldimethylsilyl chloride
FS 3D CONCORD
DR 132560-73-7, 187979-91-5
MF C6 H15 Cl Si
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3398 REFERENCES IN FILE CA (1957 TO DATE)

31 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3407 REFERENCES IN FILE CAPLUS (1957 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:360351

REFERENCE 2: 138:354709

REFERENCE 3: 138:354340

REFERENCE 4: 138:353975

REFERENCE 5: 138:353661

REFERENCE 6: 138:351251

REFERENCE 7: 138:350275

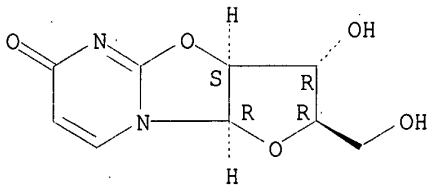
REFERENCE 8: 138:348841

REFERENCE 9: 138:348811

REFERENCE 10: 138:348737

L91 ANSWER 12 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **3736-77-4** REGISTRY
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)-, (2R,3R,3aS,9aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)- (6CI, 7CI)
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)-, stereoisomer (8CI)
CN 6H-Furo[2',3':4,5]oxazolo[3,2-a]pyrimidin-6-one, 2,3,3a,9a-tetrahydro-3-hydroxy-2-(hydroxymethyl)-, [2R-(2.alpha.,3.beta.,3a.beta.,9a.beta.)]-
OTHER NAMES:
CN .beta.-D-2',2-O-Cycloarabinouridine
CN 2,2'-Anhydro(1-.beta.-D-arabinofuranosyl)uracil
CN 2,2'-Anhydro-1-.beta.-D-arabino-furanosyluracil
CN 2,2'-Anhydro-N1-(.beta.-D-arabinofuranosyl)uracil
CN 2,2'-Anhydrouridine
CN 2,2'-O-Cyclouridine
CN O2,2'-Anhydrouridine
CN O2,2'-Cyclouridine
FS STEREOSEARCH
DR 10111-80-5, 3249-95-4, 71934-24-2, 6160-57-2, 29724-20-7
MF C9 H10 N2 O5
CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, MEDLINE, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

213 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
213 REFERENCES IN FILE CAPLUS (1957 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:299371

REFERENCE 2: 137:246565

REFERENCE 3: 136:330524

REFERENCE 4: 136:310116

REFERENCE 5: 136:217007

REFERENCE 6: 136:112689

REFERENCE 7: 135:376707

REFERENCE 8: 135:147408

REFERENCE 9: 135:137667

REFERENCE 10: 134:296043

L91 ANSWER 13 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **1336-21-6** REGISTRY
CN Ammonium hydroxide ((NH4)(OH)) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ammonium hydroxide (8CI)
OTHER NAMES:
CN Ammonia water
CN Ammonia, aqua
CN Ammonia, monohydrate
CN Aqua ammonia
CN SX 1
CN SX 1 (ammonia water)
DR 132103-60-7, 125888-87-1, 16393-49-0
MF H5 N O
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

H_4N-OH

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12544 REFERENCES IN FILE CA (1957 TO DATE)
168 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12560 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:361619

REFERENCE 2: 138:361474

REFERENCE 3: 138:361451

REFERENCE 4: 138:361203

REFERENCE 5: 138:361201

REFERENCE 6: 138:360864

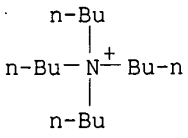
REFERENCE 7: 138:360755

REFERENCE 8: 138:359485

REFERENCE 9: 138:359482

REFERENCE 10: 138:358480

L91 ANSWER 14 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **429-41-4** REGISTRY
CN 1-Butanaminium, N,N,N-tributyl-, fluoride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ammonium, tetrabutyl-, fluoride (8CI)
CN Tetrabutylammonium fluoride (7CI)
OTHER NAMES:
CN TBAF
CN Tetra-n-butylammonium fluoride
DR 73476-21-8
MF C16 H36 N . F
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, GMELIN*, IFICDB, IFIUDB, MSDS-OHS, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (10549-76-5)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1041 REFERENCES IN FILE CA (1957 TO DATE)
9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1045 REFERENCES IN FILE CAPLUS (1957 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:354848

REFERENCE 2: 138:354709

REFERENCE 3: 138:322077

REFERENCE 4: 138:321270

REFERENCE 5: 138:304530

REFERENCE 6: 138:303913

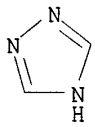
REFERENCE 7: 138:271850

REFERENCE 8: 138:255570

REFERENCE 9: 138:239267

REFERENCE 10: 138:237753

L91 ANSWER 15 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **288-88-0** REGISTRY
CN 1H-1,2,4-Triazole (7CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN s-Triazole (8CI)
OTHER NAMES:
CN 4H-1,2,4-Triazole
FS 3D CONCORD
DR 288-89-1, 25167-73-1, 27236-77-7, 116421-29-5
MF C2 H3 N3
CI COM, RPS
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, GMELIN*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3194 REFERENCES IN FILE CA (1957 TO DATE)
372 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3207 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:360216

REFERENCE 2: 138:355998

REFERENCE 3: 138:353989

REFERENCE 4: 138:353910

REFERENCE 5: 138:353848

REFERENCE 6: 138:342911

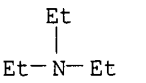
REFERENCE 7: 138:338038

REFERENCE 8: 138:330685

REFERENCE 9: 138:327168

REFERENCE 10: 138:324896

L91 ANSWER 16 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **121-44-8** REGISTRY
CN Ethanamine, N,N-diethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Triethylamine (7CI, 8CI)
OTHER NAMES:
CN (Diethylamino)ethane
CN N,N-Diethylethanamine
CN TEA
FS 3D CONCORD
DR 449752-61-8, 168277-99-4, 172227-74-6, 144514-14-7
MF C6 H15 N
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18815 REFERENCES IN FILE CA (1957 TO DATE)
729 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
18841 REFERENCES IN FILE CAPLUS (1957 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:361878

REFERENCE 2: 138:358833

REFERENCE 3: 138:356008

REFERENCE 4: 138:355157

REFERENCE 5: 138:355156

REFERENCE 6: 138:355016

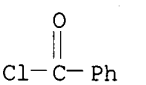
REFERENCE 7: 138:354927

REFERENCE 8: 138:354156

REFERENCE 9: 138:354096

REFERENCE 10: 138:353867

L91 ANSWER 17 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **98-88-4** REGISTRY
CN Benzoyl chloride (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Benzaldehyde, .alpha.-chloro-
CN Benzenecarbonyl chloride
CN Benzoic acid chloride
FS 3D CONCORD
MF C7 H5 Cl O
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13002 REFERENCES IN FILE CA (1957 TO DATE)
319 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13037 REFERENCES IN FILE CAPLUS (1957 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:361721

REFERENCE 2: 138:355298

REFERENCE 3: 138:354709

REFERENCE 4: 138:354639

REFERENCE 5: 138:354000

REFERENCE 6: 138:353991

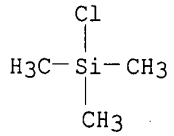
REFERENCE 7: 138:353880

REFERENCE 8: 138:353846

REFERENCE 9: 138:353837

REFERENCE 10: 138:353836

L91 ANSWER 18 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **75-77-4** REGISTRY
CN Silane, chlorotrimethyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Chlorotrimethylsilane
CN KA 31
CN KA 31 (silane)
CN Monochlorotrimethylsilane
CN Monochlorotrimethylsilicon
CN Trimethylchlorosilane
CN Trimethylsilane chloride
CN Trimethylsilicon chloride
CN Trimethylsilyl chloride
CN TSL 8031
FS 3D CONCORD
DR 127290-36-2, 36642-33-8
MF C3 H9 Cl Si
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9469 REFERENCES IN FILE CA (1957 TO DATE)
525 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9481 REFERENCES IN FILE CAPLUS (1957 TO DATE)
366 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:358835

REFERENCE 2: 138:354590

REFERENCE 3: 138:353875

REFERENCE 4: 138:353836

REFERENCE 5: 138:353789

REFERENCE 6: 138:353508

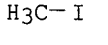
REFERENCE 7: 138:347814

REFERENCE 8: 138:344439

REFERENCE 9: 138:342117

REFERENCE 10: 138:339804

L91 ANSWER 19 OF 19 REGISTRY COPYRIGHT 2003 ACS
RN **74-88-4** REGISTRY
CN Methane, iodo- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Iodomethane
CN Methyl iodide
CN Methyl iodide (CH3I)
CN Monoiodomethane
FS 3D CONCORD
DR 147937-07-3
MF C H3 I
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16919 REFERENCES IN FILE CA (1957 TO DATE)
278 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
16935 REFERENCES IN FILE CAPLUS (1957 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:360449

REFERENCE 2: 138:360269

REFERENCE 3: 138:355364

REFERENCE 4: 138:354432

REFERENCE 5: 138:354003

REFERENCE 6: 138:354002

REFERENCE 7: 138:353858

REFERENCE 8: 138:353573

REFERENCE 9: 138:353560

REFERENCE 10: 138:349849

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FILE COVERS 1907 - 2 Jun 2003 VOL 138 ISS 23
FILE LAST UPDATED: 1 Jun 2003 (20030601/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot l88

L88 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN **2001:833338** HCAPLUS
DN **135:376707**
TI **Polymeric** compounds useful as **prodrugs**
IN **Sampath, Umashanker; Toce, Joseph A.; Nadji, Sourena**
PA **Reliable Biopharmaceutical, Inc., USA**
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM **C07H021-00**
ICS C07H019-06; C07H019-10; C07F009-655; **A61K031-7115**; **A61K031-712**; **A61K031-7125**; A61P031-00; A61P035-00
CC **63-5** (Pharmaceuticals)

Section cross-reference(s): **35**

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001085751	A1	20011115	WO 2001-US15106	20010509 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002013287	A1	20020131	US 2001-853047	20010509 <--
PRAI	US 2000-202795P	P	20000509 <--		

OS MARPAT 135:376707

AB Disclosed are **polymeric** compds. which are useful as **prodrugs**, comprising a chain of monomeric nucleosides, nucleoside analogs or abasic nucleosides, wherein at least one of the nucleosides or nucleoside analogs or a heterocyclic deriv. thereof is pharmaceutically active and the nucleosides, nucleoside analogs or abasic nucleosides are linked by a **phosphodiester** group, a **phosphorothioate** group or an H-, alkyl or alkenyl **phosphonate** group. Cytarabine **phosphoramidite** was prepd. by the reaction of 5'-DMT-N4,2'-diacetyl-2'-arabinocytidine with chloro-2-cyanoethyl-N,N-diisopropylamino **phosphoramidite** (yield 64.4%).

ST **polymer prodrug** cytarabine **phosphoramidite** nucleoside

IT Antimicrobial agents
Antitumor agents
Antiviral agents
(**polymeric** compds. useful as **prodrugs**)

IT Polynucleotides
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**polymeric** compds. useful as **prodrugs**)

IT Nucleoside analogs
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**polymeric** compds. useful as **prodrugs**)

IT Drug delivery systems
(**prodrugs; polymeric** compds. useful as **prodrugs**)

IT 9025-82-5, **Phosphodiesterase**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(**polymeric** compds. useful as **prodrugs**)

IT **30811-80-4**, Polycytidylic acid
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**polymeric** compds. useful as **prodrugs**)

IT **74-88-4**, Iodomethane, reactions **75-77-4**, Chlorotrimethylsilane, reactions **98-88-4**, Benzoyl chloride **121-44-8**, Triethylamine, reactions **288-88-0**, 1H-1,2,4-Triazole **429-41-4**, Tetrabutylammonium fluoride **1336-21-6**, Ammonium hydroxide **3736-77-4**, 2,2'-Anhydrouridine **18162-48-6**, tert-Butyldimethylsilyl chloride **40615-36-9 89992-70-1 173170-12-2**
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(**polymeric** compds. useful as **prodrugs**)

IT **82845-99-6P 120401-14-1P 173099-61-1P 373645-93-3P 373645-94-4P 373645-95-5P**

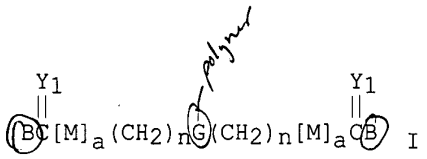
373645-96-6P
RL: **RCT (Reactant)**; SPN (Synthetic preparation); PREP (Preparation); **RACT (Reactant or reagent)**
(**polymeric** compds. useful as **prodrugs**)

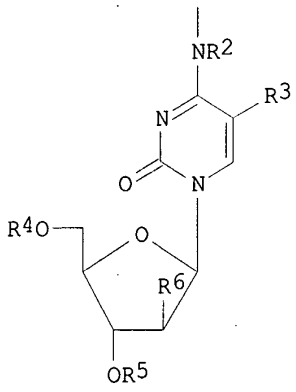
IT **50-44-2DP**, Mercaptopurine, **conjugates 50-91-9DP**, Floxuridine, **conjugates 54-42-2DP**, Idoxuridine, **conjugates 58-61-7DP**, Adenosine, **conjugates**, biological studies **70-00-8DP**, Trifluridine, **conjugates 147-94-4DP**, Cytarabine, **conjugates 154-42-7DP**, Thioguanine, **conjugates 320-67-2DP**, 5-Azacytidine, **conjugates 446-86-6DP**, Azathioprine, **conjugates 611-53-0DP**, Ibacitabine, **conjugates 3094-09-5DP**, Doxifluridine, **conjugates 4291-63-8DP**, Cladribine, **conjugates 5536-17-4DP**, Vidarabine, **conjugates 15176-29-1DP**, Edoxudine, **conjugates 21679-14-1DP**, Fludarabine, **conjugates 36791-04-5DP**, Ribavirin, **conjugates 39809-25-1DP**, Penciclovir, **conjugates 53910-25-1DP**, Pentostatin, **conjugates 55726-47-1DP**, Enocitabine, **conjugates 58739-96-1P 59277-89-3DP**, Acyclovir, **conjugates 69123-90-6DP**, Fiacitabine, **conjugates 69123-98-4DP**, Fialuridine, **conjugates 69304-47-8DP**, Brivudine, **conjugates 82410-32-0DP**, Ganciclovir, **conjugates 95058-81-4DP**, Gemcitabine, **conjugates 104227-87-4DP**, Famciclovir, **conjugates 106941-25-7DP**, Adefovir, **conjugates 113852-37-2DP**, Cidofovir, **conjugates 124832-26-4DP**, Valacyclovir, **conjugates 127759-89-1DP**, Lobucavir, **conjugates 373645-92-2P 373645-97-7P 373645-98-8P 374576-35-9P 374576-36-0P 374576-37-1P 374576-38-2P 374584-54-0P**
RL: SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(**polymeric** compds. useful as **prodrugs**)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Buff, R; BIOORGANIC & MEDICINAL CHEMISTRY LETTERS 1998, V8(5), P521 HCAPLUS
(2) Buff, R; NUCLEOSIDES & NUCLEOTIDES 1999, V18, P1387 HCAPLUS
(3) Cook, P; US 5614617 A 1997 HCAPLUS
(4) Damha, M; WO 9967378 A 1999 HCAPLUS
(5) Gmeiner, W; US 5457187 A 1995 HCAPLUS
(6) Hybridon Inc; WO 9417093 A 1994 HCAPLUS
(7) Iyer, R; NUCLEIC ACIDS RESEARCH 1990, V18, P2855 MEDLINE
(8) Liu, J; NUCLEOSIDES & NUCLEOTIDES 1999, V18, P1789 HCAPLUS
(9) Matsuda, A; J MED CHEM 1991, V34, P234 HCAPLUS
(10) Yoshimura, Y; NUCLEOSIDES & NUCLEOTIDES 1995, V14, P427 HCAPLUS

L88 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN **2001:228672** HCAPLUS
DN **134:256851**
TI **Polymer conjugates** of ara-C and ara-C derivatives
IN Greenwald, Richard B.; Choe, Yun Hwang
PA Enzon, Inc., USA
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC **63-5** (Pharmaceuticals)
Section cross-reference(s): **1**
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2001021135	A2	20010329	WO 2000-US25895	20000921 <--
	WO 2001021135	A3	20021024		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6376470	B1	20020423	US 1999-404075	19990923 <--
	AU 2001038851	A5	20010424	AU 2001-38851	20000921 <--
	EP 1278412	A2	20030129	EP 2000-963685	20000921 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI	US 1999-404075	A	19990923 <--		
	WO 2000-US25895	W	20000921		
OS	MARPAT 134:256851				
GI					





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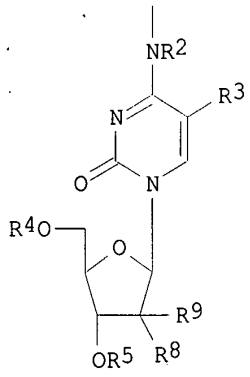

2

B = 1 or 2

AB The present invention is directed to **polymeric-prodrug** transport forms of formula: I wherein: G is a linear or branched, terminally functionalized **polymer** residue; Y1 is O, S, or NR1; M is X or Q; wherein X is an electron withdrawing group and Q is a moiety contg. a free electron pair positioned three to six atoms from C(=Y1); B is (1) or (2); R1-5 are independently selected from the group consisting of hydrogen, C1-6 alkyls, C3-12 branched alkyls, C3-8 cycloalkyls, C1-6 substituted alkyls, C3-8 substituted cycloalkyls, aryls, substituted aryls, aralkyls, C1-6 heteroalkyls, substituted C1-6 heteroalkyls; R6 is OR7 or N3, NH2, NO2, or CN, where R7 is selected from the same group which defines R1-5; R8-9 are independently selected from the group consisting of hydrogen, fluoro, chloro, bromo, iodo, or R6; and a and n are each independently zero or a pos. integer. Methods of forming and methods of treating using the **polymeric-prodrug** transport forms disclosed herein are also disclosed. PEG-amide-ara-C (II) was prepd. by

the reaction of a mixt. of ara-C and thiazolidine-2-thione-activated-PEG. The IC50 of II against P388/0 cell line was was 12 nM.

ST **polymer conjugate** ara C deriv

IT **Polymers**, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**conjugates; polymer conjugates** of ara-C and ara-C derivs.)

IT 331437-22-0P 331437-24-2P 331437-25-3P 331437-26-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**polymer conjugates** of ara-C and ara-C derivs.)

IT **147-94-4**, Ara-C **95058-81-4**, Gemcitabine 130151-32-5 155919-13-4 204133-25-5 331437-23-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(**polymer conjugates** of ara-C and ara-C derivs.)

L88 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:484947 HCAPLUS
DN 129:127165
TI Immunomodulator oligonucleotide compositions and methods for modulation of the expression of B7 protein
IN Bennett, C. Frank; Vickers, Timothy A.
PA Isis Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-70
ICS **C07H021-00**
CC **63-5** (Pharmaceuticals)
Section cross-reference(s): **1**, 2
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9829124	A1	19980709	WO 1997-US23270	19971216 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6077833	A	20000620	US 1996-777266	19961231 <--
	AU 9857051	A1	19980731	AU 1998-57051	19971216 <--
	AU 720969	B2	20000622		
	EP 957926	A1	19991124	EP 1997-953268	19971216 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000507833	T2	20000627	JP 1998-530085	19971216 <--
PRAI	US 1996-777266	A	19961231 <--		
	WO 1997-US23270	W	19971216 <--		

AB Compns. and methods for the diagnosis, prevention and treatment of immune states and disorders amenable to treatment through modulation of T cell activation are provided. In accordance with preferred embodiments, oligonucleotides are provided which are specifically hybridizable with nucleic acids encoding B7 proteins.

ST immunomodulator oligonucleotide B7 protein expression

IT Antihistamines
(H1, oligonucleotide derivs.; immunomodulator oligonucleotide compns.

and methods for modulation of the expression of B7 protein)

IT Antihistamines
(H2, oligonucleotide derivs.; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(alkyl-linked; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Toxins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibody **conjugates**; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Drug delivery systems
(carriers; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Antibodies
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**conjugates**, with toxins; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Anti-inflammatory agents
Autoimmune disease
Drug delivery systems
Immunomodulators
Immunosuppressants
Nucleic acid hybridization
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Antisense oligonucleotides
Oligonucleotides
Phosphorothioate oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Cell adhesion molecules
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(methylene(methylimino)-linked; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(methylphosphonate-linked; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(morpholino-linked; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT CD80 (antigen)
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(nucleotides encoding; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Adrenoceptor agonists
(oligonucleotide derivs.; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Polyoxyalkylenes, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(oligonucleotide derivs.; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Interferons
Phospholipids, biological studies
Thioethers
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oligonucleotide derivs.; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Oligodeoxyribonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(polyamide-linked; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Amines, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(polyamines, **nonpolymeric**, oligonucleotide derivs.; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT Biological transport
(uptake; immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT 51-20-7, 5-Bromouracil 68-94-0, Hypoxanthine 134-58-7, 8-Azaguanine 443-72-1, 6-Methyladenine 554-01-8, 5-Methylcytosine 1123-95-1, 5-Hydroxymethylcytosine 1904-98-9, 2,6-Diaminopurine 4433-40-3, 5-Hydroxymethyluracil 7355-55-7, 7-Deazaguanine 210044-87-4 210044-89-6
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT 57-10-3D, Hexadecanoic acid, oligonucleotide derivs., biological studies 57-88-5D, Cholesterol, oligonucleotide derivs. 81-25-4D, Cholic acid, oligonucleotide derivs. 124-30-1D, Octadecylamine, oligonucleotide derivs. 1249-81-6D, Thiocholesterol, oligonucleotide derivs. 25322-68-3D, oligonucleotide derivs. 42862-38-4D, Adamantane acetic acid, oligonucleotide derivs.
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT 50-18-0D, Cyclophosphamide, oligonucleotide derivs. 53-03-2D, Prednisone, oligonucleotide derivs. 83-43-2D, Methylprednisolone, oligonucleotide derivs. **446-86-6D**, Azathioprine, oligonucleotide derivs. 59865-13-3D, Cyclosporin a, oligonucleotide derivs.
RL: PEP (Physical, engineering or chemical process); **THU (Therapeutic use)**; BIOL (Biological study); PROC (Process); USES (Uses)
(immunomodulator oligonucleotide compns. and methods for modulation of the expression of B7 protein)

IT 210098-68-3 210098-73-0 210098-74-1 210098-75-2
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunomodulator oligonucleotide compns. and methods for modulation of

the expression of B7 protein)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Dougherty; US 5667998 A 1997 HCAPLUS

L88 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:221131 HCAPLUS
DN 128:290228
TI Antisense oligonucleotide modulation of MDR P-glycoprotein gene expression
IN Dean, Nicholas M.; Manoharan, Muthiah
PA ISIS Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12Q001-68
ICS A01N043-04; **C07H021-02; C07H021-04**
CC **1-6** (Pharmacology)
Section cross-reference(s): 33
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9814615	A1	19980409	WO 1997-US17800	19971001 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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	AU 9748940	A1	19980424	AU 1997-48940	19971001 <--
PRAI	US 1996-731199		19961004 <--		
	WO 1997-US17800		19971001 <--		

AB Oligonucleotides are provided which are specifically hybridizable with nucleic acids encoding the human MDR1 P-glycoprotein. Also disclosed are methods of using the oligonucleotides of the invention in methods of modulating the expression of MDR genes, inhibition of which leads to inhibition of the synthesis of MDR P-glycoproteins and thereby inhibits cellular multidrug resistance. Such inhibition is desirable for treating various hyperproliferative disorders or diseases, such as various cancers, in conjunction with chemotherapy utilizing one or more chemotherapeutic agents, for preventing or modulating the development of multidrug resistance during the chemotherapeutic treatment of an animal, and for resensitizing hyperproliferative MDR cells in an animal having such diseases or disorders that has been previously exposed to chemotherapeutic agents. Modified derivs. of the oligonucleotides of the invention, such as chimeras and **conjugates** (e.g., of an oligonucleotide and a lipophilic moiety, such as cholesterol), are also disclosed. The biol. activity and cellular uptake of oligonucleotides is enhanced by such modifications.
ST antisense oligonucleotide MDR P glycoprotein
IT Multidrug resistance proteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MDR1; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(P170; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT Organic compounds, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aliph., **conjugates** with oligonucleotides; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Antitumor agents
Chemotherapy
Cytotoxic agents
Drug delivery systems
Multidrug resistance
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Antisense oligonucleotides
Phosphorothioate oligodeoxyribonucleotides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT P-glycoproteins
mRNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Phospholipids, biological studies
Thioethers
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**conjugates** with oligonucleotides; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Biological transport
(drug; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Codons
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(initiation, of P-glycoprotein nucleic acid; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mdr; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Oligonucleotides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Polyoxyalkylenes, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligonucleotide **conjugates**; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)

IT Amines, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**polymers, conjugates** with oligonucleotides; antisense oligonucleotide modulation of MDR P-glycoprotein gene

expression)
IT Proliferation inhibition
(proliferation inhibitors; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT Codons
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(termination, of P-glycoprotein nucleic acid; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT 206139-66-4DP, ISIS 13434, 5'-fluorescein isothiocyanate **conjugate**
206139-70-0DP, ISIS 13331, 5'-fluorescein isothiocyanate **conjugate**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT 206139-66-4P, ISIS 5995 206139-67-5P, ISIS 10440 206139-68-6P, ISIS 11073 206139-69-7P, ISIS 13758 206139-70-0P, ISIS 13329
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT 50-18-0, Cyclophosphamide **50-44-2**, 6-Mercaptopurine 50-76-0, Dactinomycin **50-91-9**, Floxuridine 51-21-8, 5-Fluorouracil 55-86-7, Nitrogen mustard 56-53-1, Diethylstilbestrol 57-22-7, Vincristine 57-88-5D, Cholesterol, oligonucleotide **conjugates** 59-05-2, Methotrexate 64-86-8, Colchicine 81-25-4D, Cholic acid, oligonucleotide **conjugates** 124-30-1D, Octadecylamine, oligonucleotide **conjugates** **147-94-4**, Cytarabine 148-82-3, Melphalan **154-42-7**, 6-Thioguanine 305-03-3, Chlorambucil 865-21-4, Vinblastine 1249-81-6D, Thiocholesterol, oligonucleotide **conjugates** 1404-00-8, Mitomycin 11056-06-7, Bleomycin 15663-27-1, Cisplatin 20830-81-3, Daunorubicin 23214-92-8, Doxorubicin 25322-68-3D, oligonucleotide **conjugates** 29767-20-2, Teniposide 33419-42-0, Etoposide 42862-38-4D, Adamantane acetic acid, oligonucleotide **conjugates** 206139-63-1, ISIS 5990 206139-64-2, ISIS 10443 206139-65-3, ISIS 5998 206204-13-9D, modified
RL: **BAC (Biological activity or effector, except adverse)**; BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)
(antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT 63-37-6D, Cytidylic acid, derivs. 1032-65-1, 2'-Deoxycytidylic acid 2498-41-1 3590-36-1, 5-Methylcytidylic acid 205988-02-9 205988-03-0
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oligonucleotide with 3'-terminal; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT 205988-05-2P 205988-06-3DP, reaction products with controlled-pore glass 205988-06-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
IT **98-88-4**, Benzoyl chloride 7144-08-3, Cholesterol chloroformate 205988-04-1
RL: **RCT (Reactant)**; **RACT (Reactant or reagent)**
(reaction; antisense oligonucleotide modulation of MDR P-glycoprotein gene expression)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Gewirtz; Proc Natl Acad Sci 1996, V93, P3161 HCAPLUS

(2) Hoke; US 5585479 A 1996 HCAPLUS
(3) Labhasetwar; Advanced Drug Delivery Reviews 1997, V24, P109 HCAPLUS
(4) Milner; Nature Biotech 1997, V15, P537 HCAPLUS
(5) Rojanasakul; Advanced Drug Delivery Reviews 1996, V18, P115 HCAPLUS

L88 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN 1996:161185 HCAPLUS
DN 124:197760
TI Photocleavable agents and **conjugates** for the detection and isolation of biomolecules.
IN Rothschild, Kenneth J.; Sonar, Sanjay M.; Olejnik, Jerzy
PA USA
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
IC C07C205-00; C07C205-06; C07C205-07; C07D235-02; C07H001-06; C07H001-08; **C07H021-02**; **C07H021-04**; C07K001-02; C07K001-04; C07K001-08; C07K001-10
CC 9-15 (Biochemical Methods)
Section cross-reference(s): **1**, 3, 14
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9531429	A1	19951123	WO 1995-US5555	19950511	<--
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP					
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
	US 5643722	A	19970701	US 1994-240511	19940511	<--
	US 5986076	A	19991116	US 1994-345807	19941122	<--
	CA 2189848	AA	19951123	CA 1995-2189848	19950511	<--
	AU 9526359	A1	19951205	AU 1995-26359	19950511	<--
	EP 763009	A1	19970319	EP 1995-921230	19950511	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE					
	JP 10500409	T2	19980113	JP 1995-529698	19950511	<--
	US 6210941	B1	20010403	US 1999-290325	19990412	<--
	US 6344320	B1	20020205	US 1999-307579	19990507	<--
	US 6358689	B1	20020319	US 2000-583243	20000531	<--
	US 2002123032	A1	20020905	US 2001-943120	20010830	<--
	US 6566070	B2	20030520			
	US 2003059785	A1	20030327	US 2001-34736	20011227	<--
PRAI	US 1994-240511	A	19940511	<--		
	US 1994-345807	A	19941122	<--		
	WO 1995-US5555	W	19950511	<--		
	US 1995-345807	A	19951122	<--		
	US 1997-884325	A1	19970627	<--		
	US 1999-290325	A1	19990412	<--		
	US 1999-307579	A1	19990507	<--		
	US 1999-335018	A1	19990617	<--		
	US 2000-583243	A1	20000531			

OS MARPAT 124:197760
AB This invention relates to agents and **conjugates** that can be used to detect and isolate target components from complex mixts. such as nucleic acids from biol. samples, cells from bodily fluids, and nascent proteins from translation reactions. Agents comprise a detectable moiety bound to a photoreactive moiety. **Conjugates** comprise agents coupled to substrates by covalent bonds which can be selectively cleaved with the administration of electromagnetic radiation. Target substances labeled with detectable mols. can be easily identified and sepd. from a heterologous mixt. of substances. Exposure of the **conjugate** to radiation releases the target in a functional form and completely unaltered. Using photocleavable mol. precursors as the **conjugates**

, label can be incorporated into macromols., the nascent macromols. isolated, and the label completely removed. The invention also relates to targets isolated with these **conjugates** which may be useful as pharmaceutical agents or compns. that can be administered to humans and other mammals. Useful compns. include biol. agents such as nucleic acids, proteins, lipids and cytokines. **Conjugates** can also be used to monitor the pathway and half-life of pharmaceutical compns. in vivo and for diagnostic, therapeutic and prophylactic purposes. The invention also relates to kits comprised of agents and **conjugates** that can be used for the detection of diseases, disorders and nearly any individual substance in a complex background of substances.

ST photocleavable agent **conjugate** biomol detection isolation; disease diagnosis photocleavable agent; drug therapy photocleavable agent; nucleic acid detection isolation photocleavable agent; **biopolymer** detection isolation photocleavable agent; biotin photocleavable deriv biomol detection isolation

IT Phosphatidylethanolamines
Phosphatidylserines
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(acylated, photocleavable biotin **conjugates**; photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Transplant and Transplantation
(bone marrow; photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Amino acids, preparation
Peptides, preparation
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(**conjugates** with photocleavable agents; photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 2,4-Dinitrophenyl group
Animal tissue
Animal tissue culture
Antibiotics
Bacteria
Biotinylation
Blood
Body fluid
Cell
Ceramic materials and wares
Cholera
Chromatography
Diagnosis
Electromagnetic wave
Fluorescent substances
Hematopoietic precursor cell
Immunomodulators
Infection
Infrared radiation
Light
Liposome
Lymph
Magnetic substances
Micelles
Microwave
Neoplasm
Nucleic acid hybridization
Parasite
Pharmaceutical analysis
Pharmaceuticals

Photochemistry
Photolysis
Physiological saline solutions
Polymerase chain reaction
Radio wave
Semiconductor materials
Therapeutics
Ultraviolet radiation
Vaccines
Virus
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT **Biopolymers**
Enzymes
Fatty acids, analysis
Lipids, analysis
Lymphokines and Cytokines
Neoplasm inhibitors
Nucleic acids
Nucleosides, analysis
Polysaccharides, analysis
Proteins, analysis
Ribonucleic acids, transfer
Toxins
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Deoxyribonucleic acids
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Ribonucleic acids
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Luminescent substances
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Antibodies
Avidins
Carbohydrates and Sugars, uses
Glycoproteins, uses
Halides
Haptens
Hormone receptors
Hormones
Nitroxides
Radioelements, uses
Receptors
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Glass, oxide
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Metals, analysis

RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Plastics
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Collagens, biological studies
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Glycerides, biological studies
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Oils
RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(CD3, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(CD34, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Onium compounds
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(acridinium, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Molecules
(biochem., photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Macromolecular compounds
RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
(biol., photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Therapeutics
(chemo-, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Virus, animal
(cytomegalo-, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Magnetic substances
(dia-, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Digestive tract
(disease, gastroenteritis, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Genetics
(disorders, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Virus, animal
(entero-, photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT Immunoassay
(enzyme-linked immunosorbent assay, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Magnetic substances
(ferro-, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Embryo
(fetus, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Virus, animal
(hepatitis B, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Receptors
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(hormone, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Virus, animal
(human T-cell leukemia type I, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Virus, animal
(human immunodeficiency, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Nucleic acid hybridization
(in situ, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Body fluid
(interstitial, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Ribonucleic acids, transfer
RL: SPN (Synthetic preparation); PREP (Preparation)
(lysine-specific, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Nucleotides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(oligo-, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Virus, animal
(papilloma, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Magnetic substances
(para-, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Cell
(stem, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT Bone marrow
(transplant, photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT 7553-56-2, Iodine, uses 7726-95-6, Bromine, uses 7782-41-4, Fluorine, uses 7782-50-5, Chlorine, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT 260-94-6, Acridine 7440-18-8D, Ruthenium, chelates 9013-20-1, Streptavidin 11028-71-0, Concanavalin A 14809-11-1D, **Phosphoramidous** acid, derivs., linkers 73467-76-2, Benzopyrene
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)
IT 58-85-5DP, Biotin, photocleavable derivs. 91-64-5DP, Coumarin, photocleavable derivs. 605-65-2DP, Dansyl chloride, photocleavable

derivs. 2321-07-5DP, photocleavable derivs. 13558-31-1DP, photocleavable derivs. 166983-72-8P 174406-67-8P 174406-69-0P 174406-72-5P
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 9012-36-6, Agarose
RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified); ANST (Analytical study); USES (Uses)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 9012-90-2, DNA **polymerase** 9014-24-8, RNA **polymerase** 9027-67-2, Terminal deoxynucleotidyl transferase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 56-84-8, Aspartic acid, reactions 56-86-0, Glutamic acid, reactions **58-61-7**, Adenosine, reactions 100-97-0, reactions 105-53-3, Diethyl malonate 951-77-9, Deoxycytidine 2840-26-8, 3-Amino-4-methoxybenzoic acid 3113-72-2, 5-Methyl-2-nitrobenzoic acid 6851-99-6, 2-Bromo-2'-nitroacetophenone 17776-78-2 58822-25-6, Leucine-enkephalin 62935-72-2 72040-64-3 74124-79-1, N,N'-Disuccinimidyl carbonate **89992-70-1**, 2-Cyanoethyl-N,N-diisopropylchlorophosphoramidite 105409-84-5 147218-60-8 166983-74-0, 5-Aminomethyl-2-nitroacetophenone hydrochloride 174406-73-6
RL: **RCT (Reactant); RACT (Reactant or reagent)**
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 23082-65-7P 38818-49-4P, 5-Methyl-2-nitrobenzoyl chloride 58822-25-6DP, Leucine-enkephalin, photocleavable biotin **conjugates** 69976-70-1P, 5-Methyl-2-nitroacetophenone 99821-59-7P, 5-Bromomethyl-2-nitroacetophenone 130017-51-5P 130017-52-6P, 2-Nitro-4-methoxy-5-(N-acetylamino)acetophenone 141468-63-5P 166983-70-6P 166983-71-7P 174157-59-6P 174406-66-7P 174406-68-9P 174406-70-3P 174406-71-4P 174406-74-7P 174406-75-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 105409-84-5DP, photocleavable biotin **conjugates** 105434-72-8DP, photocleavable biotin **conjugates** 143908-73-0DP, photocleavable biotin **conjugates** 147218-60-8DP, photocleavable biotin **conjugates** 174157-60-9P 174157-61-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(photocleavable agents and **conjugates** for detection and isolation of biomols.)

IT 91-64-5P, Coumarin
RL: ARG (Analytical reagent use); NUU (Other use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(photocleavable derivs.; photocleavable agents and **conjugates** for detection and isolation of biomols.)

L88 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN 1994:599511 HCAPLUS
DN 121:199511
TI Ribozymes with modified bases and backbones and their use in therapeutics
IN Ludwig, Janos; Benseler, Fritz; Kotzorek, Gerd
PA Ribonetics GmbH, Germany
SO PCT Int. Appl., 25 pp.

CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N009-00
ICS **C07H021-00**; **C07H021-04**; A61K031-70; C07H019-167; C07H019-19
CC 7-2 (Enzymes)
Section cross-reference(s): **1**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9413789	A2	19940623	WO 1993-GB2486	19931203 <--
WO 9413789	A3	19940804		

W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9459741	A1	19940704	AU 1994-59741	19931203 <--
EP 672122	A1	19950920	EP 1994-905771	19931203 <--

R: CH, DE, FR, GB, IT, LI, NL

PRAI GB 1992-25427 19921204 <--
WO 1993-GB2486 19931203 <--
OS MARPAT 121:199511
AB Ribozymes with increased stability against RNases and exonucleases and improved cellular uptake are described. The ribozyme active site is flanked by target-specific and the catalytic domain: 3'-aaAgCRWSGagUAgUC-5' is made up of deoxynucleotides with at least one a or g is a 2'-substituted deriv. R+S = A-U or C-G; W is either a nucleotide loop sequence or diol bridges connected with **phosphodiester** or substituted neutral phosphotriester deriv. linkages. These alterations increase nuclease resistance and the presence of the aliph. diol bridge improves the uptake of the ribozyme by cells (no data). A method for the synthesis of 2'-difluoromethyl nucleosides is described and demonstrated. 6-Ethoxy-N9-.beta.-D-ribofuranosylpurine was converted to 6-ethoxy-3'-5'-O-(1,1,3,3-teraisopropyldisiloxyl)-N9-.beta.-D-ribofuranosylpurine by reaction with TIPDSiCl2 and the 2'-OH was converted to an oxo group with CrO3 and pyridine in dichloromethane. This was then **conjugated** with difluorophenylmethylsulfone and the **conjugate** cleaved with SmI2 and then with TBAF to yield 6-ethoxy-2'-C-difluorometyl-N9-.beta.-D-ribofuranosylpurine.
ST ribozyme base analog diol **polymer**; therapeutic ribozyme base analog
IT Nucleotides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(2'-substituted; ribozyme catalytic domains carrying diol **polymers** and, increased nuclease resistance and cellular uptake in relation to)
IT Ribozymes
RL: BIOL (Biological study)
(catalytic domains contg. modified nucleotides and diol **polymers**, increased nuclease resistance and cellular uptake in relation to)
IT Nucleotides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(oligo-, contg. modified nucleotides and diol **polymers**, ribozyme catalytic domains, increased nuclease resistance and cellular uptake in relation to)
IT Nucleotides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(oligo-, thiophosphate-linked, in ribozyme catalytic domains, modified nucleotides and diol bridges in, increased nuclease resistance and cellular uptake in relation to)

IT Glycols, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**polymers**, ribozyme catalytic domains carrying modified nucleotides and, increased nuclease resistance and cellular uptake in relation to)

IT **58-61-7D**, Adenosine, 2'-substituted analogs 118-00-3D, Guanosine, 2'-substituted analogs
RL: BIOL (Biological study)
(in ribozyme catalytic domains, modified nucleotides and diol bridges in, increased nuclease resistance and cellular uptake in relation to)

IT 157979-83-4P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and oxidn. of, in prepn. fluoromethyl-substituted deriv.)

IT 157979-84-5P 157979-85-6P 157979-86-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reactions of, in prepn. fluoromethyl-substituted deriv.)

IT 140187-77-5P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and silylation of, in prepn. fluoromethyl-substituted deriv.)

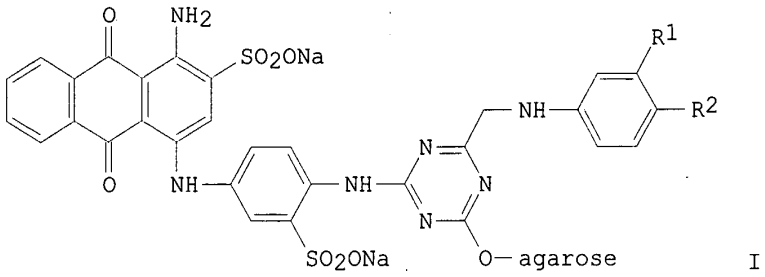
IT 157979-87-8P
RL: PREP (Preparation)
(prepn. of, as fluoromethyl-substituted purine riboside deriv. for use in ribozymes, increased nuclease resistance and cellular uptake in relation to)

IT 58-63-9, Inosine
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of, in prepn. fluoromethyl-substituted deriv.)

L88 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS
AN **1989:609758** HCAPLUS
DN **111:209758**
TI Immobilized triazinyl dyes in preparation of a protein fraction exhibiting cell growth-inhibiting activity
IN Knight, Ernest, Jr.; Fahey, Diana
PA du Pont de Nemours, E. I., and Co., USA
SO U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 617,073, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM C12P021-00
NCL 435068000
CC 2-1 (Mammalian Hormones)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4803163	A	19890207	US 1986-883742	19860709 <--
PRAI US 1984-617073		19840604 <--		

OS MARPAT 111:209758
GI



I

AB A process for prepg. proteins capable of inhibiting the growth of human lymphoblastoid cells comprises (a) growing either human diploid fibroblasts in medium contg. a mixt. of polyinosinic and polycytidylic acids, or growing human lymphoblastoid cells (Ragi, Daudi, Namalva) in medium contg. either mezerein or phorbol 12-myristate 13-acetate; (b) contacting the culture medium with immobilized triazinyl dye I (R1, R2 = H, SO2ONa) capable of binding interferons; and (c) isolating the growth-inhibiting proteins from the unbound fraction. Supernatant from human diploid fibroblasts grown in serum-free medium was concd. from 6 L to 300 mL, applied to a column of Blue Sepharose CL-6B, concd. on Amicon YM-10 (10,000 mol. wt. cutoff), and dialyzed. This protein fraction inhibited cell growth at 50-400 mg protein/mL when applied to Namalva cells grown at 37.degree. in 95% air/5% CO2. It also inhibited DNA synthesis 95%. .beta. Interferon was present in the concd. fraction at .apprx.500-2000 units/mL, but had no effect on Namalva cell growth.

ST lymphoblast growth inhibitor prepn triazinyl dye; DNA synthesis inhibition fibroblast protein

IT Deoxyribonucleic acid formation
(lymphoblast growth-inhibiting proteins effect on)

IT Fibroblast
(lymphoblast growth-inhibiting proteins isolation from, immobilized triazinyl dyes in)

IT Lymphoblast
(protein inhibitor of growth of, prepn. of, from fibroblast or lymphoblast, immobilized triazinyl dyes in)

IT Animal cell line
(Daudi, lymphoblast growth-inhibiting proteins isolation from, immobilized triazinyl dyes in)

IT Animal cell line
(Namalwa, lymphoblast growth-inhibiting proteins isolation from, immobilized triazinyl dyes in)

IT Animal cell line
(Raji, lymphoblast growth-inhibiting proteins isolation from, immobilized triazinyl dyes in)

IT Animal cell line
(WISH lymphoblast, lymphoblast growth-inhibiting proteins effect on growth of)

IT Hemopoietins
RL: PREP (Preparation)
(lymphoblast growth-inhibiting, prepn. of, from fibroblast or lymphoblast, immobilized triazinyl dyes in)

IT 9012-36-6D, Agarose, triazinyl dye **conjugates** 16561-29-8, Phorbol 12-myristate 13-acetate **30811-80-4**, Poly(cytidylic acid) 30918-54-8, Poly(inosinic acid) 34807-41-5, Mezerein 67115-58-6, Blue Sepharose CL-6B
RL: BIOL (Biological study)
(in lymphoblast growth-inhibiting proteins prepn.)

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FILE LAST UPDATED: 1 Jun 2003  (20030601/ED)

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 substance identification.


=> d all tot l99

L99  ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2003 ACS
AN   1999:819486  HCAPLUS
DN   132:60098
TI   Antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and
     its analogs
IN   Damha, Massad Jose; Parniak, Michael A.; Noronha, Anne M.; Wilds,
     Christopher; Borkow, Gadi; Arion, Dominique
PA   McGill University, Can.
SO   PCT Int. Appl., 91 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  C12N015-11
     ICS  C07H021-00; A61K031-70; C07H019-09; C07H019-19
CC   3-1 (Biochemical Genetics)
     Section cross-reference(s): 1, 34
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
PI   WO 9967378         A1   19991229       WO 1999-CA571    19990617 <--
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2331333          AA   19991229       CA 1999-2331333  19990617
     AU 9945953          A1   20000110       AU 1999-45953    19990617
     EP 1088066          A1   20010404       EP 1999-928945   19990617
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
PRAI CA 1998-2241361    A    19980619
     WO 1999-CA571      W    19990617
AB   The present invention relates to modified oligonucleotide therapeutic
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agents to selectively prevent gene transcription and expression in a sequence-specific manner. In particular, this invention relates to the selective inhibition of protein biosynthesis via antisense strategy using oligonucleotides constructed from arabinonucleotide or modified arabinonucleotide residues. More particularly this invention relates to the use of antisense oligonucleotides having .beta.-D-arabinofuranose, 2-deoxy,2,2-difluoro-.beta.-D-ribose, or 2-deoxy-2-fluoro-.beta.-D-arabinose sugars to hybridize to complementary RNA such as cellular mRNA, viral RNA, etc. Arabinonucleoside oligomers serve as excellent models of antisense agents that have enhanced resistance to the action of degradative nucleases, bind to RNA through duplex formation, elicit RNase H activity, and inhibit in vitro and intracellular specific gene expression by binding to duplex DNA to form triple helixes. Accordingly, arabinonucleosides and its analogs have potential utility as therapeutic agents and/or tools for the study and control of specific gene expression in cells and organisms.

ST arabinofuranose antisense oligonucleotide hybridization gene therapy; gene modulation antisense oligonucleotide arabinofuranose; RNase H induction antisense oligonucleotide arabinofuranose; nuclease resistance antisense oligonucleotide arabinofuranose

IT Gene therapy
Transcriptional regulation
(antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT DNA
Double stranded RNA
RNA
Viral RNA
mRNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT Antisense oligonucleotides
Oligodeoxyribonucleotides
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(arabinofuranose-contg.; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT Ribozymes
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(deoxy; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT Proteins, general, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(oligoarabinonucleotides nonspecific interaction with; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT DNA formation
(replication; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT DNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(single-stranded; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT Quaternary structure
(triple helix; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT 150288-69-0 150288-70-3 204867-66-3 252971-12-3 253187-14-3

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT 25545-03-3DP, .beta.-D-Arabinofuranose, oligonucleotides contg. 125155-51-3DP, oligonucleotides contg. 223775-17-5P 252932-95-9DP, oligonucleotides contg. 253186-80-0P 253186-87-7P 253186-93-5P 253186-99-1P 253187-06-3P 253187-08-5P 253187-09-6P 253187-10-9P 253187-11-0P 253187-12-1P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT 9050-76-4, RNase H
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(induction of; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT 9026-81-7, Nuclease
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(resistance to; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

IT 253277-10-0
RL: PRP (Properties)
(unclaimed nucleotide sequence; antisense oligonucleotide constructs based on .beta.-D-arabinofuranose and its analogs)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Aoyagi, M; Bioorganic & Medicinal Chemistry Letters 1996, V6, P1573 HCAPLUS
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(11) Wilds, C; Bioconjug Chem 1999, V10(2), P299 HCAPLUS
(12) Xodo, L; J Biomol Struct Dyn 1994, V11(4), P703 HCAPLUS

L99 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:514926 HCAPLUS
DN 131:243508
TI 2'-deoxy-2'(S)-ethynyl oligonucleotides: synthesis and pairing properties
AU **Buff, Rolf**; Hunziker, Jurg
CS Department of Chemistry and Biochemistry, University of Bern, Bern, 3012, Switz.
SO Nucleosides & Nucleotides (**1999**), **18**(6 & 7), **1387**-1388
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
CC 33-9 (Carbohydrates)
AB A symposium on the prepn. of oligonucleotides from 2'-deoxy-2'(S)-ethynyl-adenosine, -cytidine, -guanosine, -thymidine and -uridine. Whereas the modified pyrimidine oligonucleotides uniformly lead to weaker binding affinity with DNA and RNA complements, the corresponding adenine

oligonucleotides show enhanced thermal stability in duplexes with complementary DNA and decreased stability with RNA.
ST oligonucleotide deoxyethynyl synthesis symposium; deoxyethynyl oligonucleotide DNA RNA duplex thermal stability symposium
IT Thermal stability
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
IT Oligonucleotides
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
IT DNA
RNA
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
IT 244235-42-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
IT 244235-43-6P 244235-44-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
IT 138481-68-2P 159755-33-6P 205500-35-2P 244235-45-8P 244235-46-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and pairing properties of deoxy-(S)-ethynyl oligonucleotides)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Buff, R; Med Chem Lett 1998, V8, P521 HCAPLUS
(2) Iino, T; Tetrahedron 1994, V50, P10397 HCAPLUS
(3) Sproat, B; J Chem Soc Perkin Trans 1 1994, P419 HCAPLUS

L99 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:508686 HCAPLUS
DN 131:228943
TI Increased cytotoxicity and decreased in vivo toxicity of FdUMP[10] relative to 5-FU
AU **Liu, Jinqian**; Skradis, Alan; Kolar, Carol; Kolath, Jeff; Anderson, James; Lawson, Terrence; Talmadge, James; Gmeiner, William H.
CS Eppley Institute and Department of Pharmaceutical Sciences, University of Nebraska Medical Center, Omaha, NE, 68198-6805, USA
SO Nucleosides & Nucleotides (**1999**), **18**(8), **1789**-1802
CODEN: NUNUD5; ISSN: 0732-8311
PB Marcel Dekker, Inc.
DT Journal
LA English
CC 33-10 (Carbohydrates)
Section cross-reference(s): 1, 4
AB The efficacy of treatment with 5-Fluorouracil (5-FU) is limited, in part, by its inefficient conversion to 5-Fluoro-2'-deoxyuridine-5'-O-monophosphate (FdUMP). We present data indicating that FdUMP[10], designed as a pro-drug for intracellular release of FdUMP[10], is cytotoxic as a consequence of uptake of the multimeric form. FdUMP[10] is stable in cell culture medium, with more than one-half of the material persisting as multimers of at least six nucleotides after a 48 h incubation at 37.degree.C. FdUMP[10] is more than 400 times more cytotoxic than 5-FU towards human colorectal tumor cells (H630). FdUMP[10] also has decreased toxicity in vivo, with doses as high as 200 mg/kg/day (qdx3) administered to Balb/c mice without morbidity, compared

to a max. tolerated dose of 45 mg/kg/day for 5-FU using the same protocol. FdUMP[10] shows reduced sensitivity to OPRTase- and TK-mediated drug resistance, relative to 5-FU and FdU, resp., and is much more cytotoxic than 5-FU towards cells that overexpress thymidylate synthase. Thus, FdUMP[10] is less susceptible to resistance mechanisms that limit the clin. utility of 5-FU. The increased cytotoxicity, decreased toxicity in vivo, and reduced sensitivity to drug resistance of FdUMP[10], relative to 5-FU, indicates multimeric FdUMP[10] is potentially valuable as an anti-neoplastic agent, either as a single agent, or in combination with 5-FU.

ST fluorouracil fluorodeoxyuridine cytotoxicity toxicity antiproliferative; fluorodeoxyuridine monophosphate cytotoxicity colorectal tumors

IT Intestine, neoplasm
(colorectal, human; increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

IT Toxicity
(in vivo; increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

IT Cytotoxicity
Proliferation inhibition
(increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

IT 51-21-8, 5-Fluorouracil
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

IT 244014-82-2P
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

IT **50-91-9**, 5-Fluoro-2'-deoxyuridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(increased cytotoxicity and decreased in vivo toxicity of FdUMP relative to 5-FU)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(24) Wolmark, N; J Clin Oncol 1993, V11, P1879 MEDLINE
(25) Wolmark, N; J Natl Cancer Inst 1992, V80, P30

L99 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:200891 HCAPLUS
DN 128:283033
TI 2'-deoxy-2'(S)-ethynyl oligodeoxyribonucleotides: a modification which selectively stabilizes oligoadenylate pairing to DNA complements
AU **Buff, Rolf**; Hunziker, Jurg
CS Department of Chemistry and Biochemistry, University of Bern, Bern, CH-3012, Switz.
SO Bioorganic & Medicinal Chemistry Letters (**1998**), **8**(**5**), **521**-524
CODEN: BMCLE8; ISSN: 0960-894X
PB Elsevier Science Ltd.
DT Journal
LA English
CC 33-10 (Carbohydrates)
AB Oligonucleotides consisting of 2'-deoxy-2'(S)-ethynyl-thymidine, -uridine, and -adenosine have been prepd. Whereas the modified pyrimidine oligonucleotides uniformly lead to weaker pairing affinity with DNA and RNA complements, the corresponding adenine oligonucleotides show enhanced thermal stability in duplexes with complementary DNA and decreased stability with RNA.
ST structure property thermal stability oligodeoxyribonucleotide duplex; oligoadenylate pairing DNA prepn thermal stability; deoxyethynyl oligodeoxyribonucleotide duplex prepn thermal stability
IT Molecular structure-property relationship
Thermal stability
(prepn. of deoxy-ethynyl oligodeoxyribonucleotides and modification which selectively stabilizes oligoadenylate pairing to DNA complements)
IT DNA
Oligodeoxyribonucleotides
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of deoxy-ethynyl oligodeoxyribonucleotides and modification which selectively stabilizes oligoadenylate pairing to DNA complements)
IT 55508-38-8P 60593-72-8P 154304-90-2P 173720-28-0P 205602-05-7P
205703-79-3P 205703-80-6P 205703-81-7P 205703-82-8P 205703-83-9P
205703-84-0P 205703-85-1P 205703-86-2P 205703-87-3P 205749-92-4P
205749-99-1P 205750-42-1P 205750-44-3P 205750-45-4P 205750-56-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of deoxy-ethynyl oligodeoxyribonucleotides and modification which selectively stabilizes oligoadenylate pairing to DNA complements)
IT 79154-57-7 138481-68-2 159755-33-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of deoxy-ethynyl oligodeoxyribonucleotides and modification which selectively stabilizes oligoadenylate pairing to DNA complements)
IT 100034-54-6P 205500-32-9P 205500-33-0P 205500-34-1P 205500-35-2P
205500-36-3P 205500-37-4P 205500-38-5P 205500-39-6P 205500-40-9P
205500-41-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of deoxy-ethynyl oligodeoxyribonucleotides and modification which selectively stabilizes oligoadenylate pairing to DNA complements)
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(3) Conolly, B; Oligonucleotides and Analogues 1991, P155
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L99 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:913775 HCAPLUS
DN 124:146762
TI Oligonucleotides containing 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy
IN Gmeiner, William H.; Iversen, Patrick L.
PA University of Nebraska, USA
SO U.S., 16 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07H021-02
ICS C07H021-04
NCL 536025500
CC 33-10 (Carbohydrates)
Section cross-reference(s): 1, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5457187	A	19951010	US 1993-164089	19931208 <--
	US 5663321	A	19970902	US 1995-474810	19950607
	US 5614505	A	19970325	US 1995-526337	19950911
	US 5741900	A	19980421	US 1995-526296	19950911
PRAI	US 1993-164089		19931208		

AB A homo-oligonucleotide consisting essentially of between 2 and 26 monomers of 5-fluorodeoxyuridine 5'-monophosphate (FdUMP) covalently linked via 3'- to 5'-phosphodiester linkages, where at the 3'- or 5'-terminus there is covalently linked a mol. selected from the group consisting of cholesterol, ethyl-spaced adamantane, 1,2-di-hexadecylglycerol and poly-L-lysine, is synthesized and used as a polymeric drug delivery system for prodn. of FdUMP, the potent inhibitor of thymidylate synthetase (TS) and an important target in cancer chemotherapy. Thus, e.g., the phosphoramidites of 5'-O-[4,4'-dimethoxytrityl]-[2'-O-t-butyl-dimethylsilyl]-5-fluorouridine and 5'-O-[4,4'-dimethyloxytrityl]-5-fluorodeoxyuridine were prepd. and used in the solid phase synthesis of FrUn and FdUn (homo-oligomeric 5-fluorouridine and 5-fluorodeoxyuridine, resp., polymer length n). In cytotoxicity studies, the ratio of the estd. LD50 for fluorouridine monomer over fluorouridine polymer of length n (FdU/FdUn) was 14.7 (n = 8), 28.9 (n = 12), and 51.6 (n = 16), giving a relative potency per residue of 1.8, 2.4, and 3.2, resp.
ST oligonucleotide fluorouracil polymeric drug cancer chemotherapy
IT Neoplasm inhibitors
Pharmaceutical dosage forms
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)
IT 57-88-5DP, Cholesterol, conjugates with homo-oligonucleotides of 5-fluorodeoxyuridine 5'-monophosphate and 5-fluorouridine 5'-monophosphate 134-46-3DP, 5-Fluorodeoxyuridine 5'-monophosphate, homo-oligonucleotides, conjugated with lipophilic or cationic moieties 770-71-8DP, 1-(Hydroxymethyl)adamantane, conjugates with homo-oligonucleotides of 5-fluorodeoxyuridine 5'-monophosphate and 5-fluorouridine 5'-monophosphate 796-66-7DP, 5-Fluorouridine 5'-monophosphate, homo-oligonucleotides, conjugated with lipophilic or cationic moieties 6076-35-3DP, conjugates

with homo-oligonucleotides of 5-fluorodeoxyuridine 5'-monophosphate and 5-fluorouridine 5'-monophosphate 25104-18-1DP, Poly-L-lysine, conjugates with homo-oligonucleotides of 5-fluorodeoxyuridine 5'-monophosphate and 5-fluorouridine 5'-monophosphate 162757-39-3P 162953-17-5P 173150-30-6P 173249-47-3P 173249-48-4P 173249-49-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)

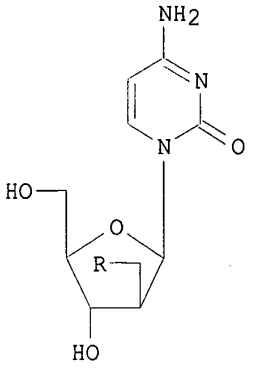
IT 157770-11-1P 157770-12-2P
RL: BYP (Byproduct); PREP (Preparation)
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)

IT 316-46-1, 5-Fluorouridine 18162-48-6, tert-Butyldimethylsilyl chloride 40615-36-9, 4,4'-Dimethoxytrityl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)

IT 104495-48-9P 142246-63-7P 157770-09-7P, 5'-O-[4,4'-Dimethoxytrityl]-5-fluorouridine 157770-10-0P, 5'-O-[4,4'-Dimethoxytrityl]-[2'-O-tert-butyldimethylsilyl]-5-fluorouridine 173241-78-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)

IT 51-21-8, 5-Fluorouracil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligonucleotides contg. 5-fluorouracil as polymeric drug delivery systems in cancer chemotherapy)

L99 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:631011 HCAPLUS
DN 123:257217
TI Synthesis of (2'S)-1-(2-C-azidomethyl-2-deoxy and 2-C-cyanomethyl-2-deoxy-.beta.-D-arabinofuranosyl)cytosines
AU **Yoshimura, Yuichi**; Satoh, Hiroshi; Sakata, Shinji; Ashida, Noriyuki; Miyazaki, Shuichi; Matsuda, Akira
CS R and D Division, Yamasa Corporation, Chiba, 288, Japan
SO Nucleosides & Nucleotides (**1995**), **14**(3-5), **427-9**
CODEN: NUNUD5; ISSN: 0732-8311
PB Dekker
DT Journal
LA English
CC 33-9 (Carbohydrates)
Section cross-reference(s): 1
GI



I

AB Cyanomethyldeoxyarabinosylcytosine I (R = CN) and azidomethyldeoxyarabinosylcytosine I (R = N3) were synthesized from uridine. The anti-neoplastic activities of these compds. were evaluated.

ST C nucleoside synthesis antitumor; azidomethyldeoxyarabinosylcytosine synthesis antitumor; cyanomethyldeoxyarabinosylcytosine synthesis antitumor

IT Neoplasm inhibitors
(synthesis of C-azidomethyldeox- and C-cyanomethyldeoxy nucleosides)

IT 168975-40-4P 168975-41-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of C-azidomethyldeox- and C-cyanomethyldeoxy nucleosides)

IT 6160-65-2, 1,1'-Thiocarbonyldiimidazole 16640-68-9, Cyanomethylenetriphenylphosphorane 84828-97-7 102789-11-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of C-azidomethyldeox- and C-cyanomethyldeoxy nucleosides)

IT 102789-16-2P 161258-54-4P 168975-42-6P 168975-43-7P 168975-44-8P 168975-45-9P 168975-46-0P 168975-47-1P 168975-48-2P 168975-49-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of C-azidomethyldeox- and C-cyanomethyldeoxy nucleosides)

L99 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:374664 HCAPLUS
DN 122:123152
TI Oligonucleotide analogs containing ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals
IN Kandimalla, Ekambar R.; Temsamani, Jamal; Agrawal, Sudhir
PA Hybridon, Inc., USA
SO PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07H021-00
ICS C12N015-11; A61K031-70
CC 1-12 (Pharmacology)
Section cross-reference(s): 3, 33
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9417093	A1	19940804	WO 1994-US902	19940125 <--

W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA	2154578	AA	19940804	CA 1994-2154578	19940125
AU	9461654	A1	19940815	AU 1994-61654	19940125
EP	677056	A1	19951018	EP 1994-908639	19940125
EP	677056	B1	19960522		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

CN	1121721	A	19960501	CN 1994-191393	19940125
AT	138384	E	19960615	AT 1994-908639	19940125
ES	2086997	T3	19960701	ES 1994-908639	19940125
JP	08508714	T2	19960917	JP 1994-517287	19940125
FI	9503541	A	19950831	FI 1995-3541	19950724
PRAI US	1993-9262		19930125		
	WO 1994-US902		19940125		

AB Disclosed is an oligonucleotide analog comprising at least one ribonucleotide alkylphosphonate or alkylphosphonothioate. This analog is preferably from 2 to 60 nucleotides in length and has at least one ribonucleotide substituted at the 2' position of its ribose group. Also disclosed are therapeutic formulations comprising this oligonucleotide analog, methods of inhibiting the expression of a gene from a virus, pathogenic organism, or cell, the expression of which is assocd. with a disease state, and methods of treating a mammal infected with a virus or pathogenic organism or afflicted with a disorder resulting from the expression of a cellular gene. Oligonucleotide CTCTCGCACCCATCTCTCTCCUUCT, contg. methylphosphonate linkages between the first 20 nucleotides and phosphodiester linkages between the remaining nucleotides and contg. 2'-O-Me groups on residues 21-24, was prepd. and characterized. The methylphosphonate modification did not hinder duplex formation with complementary DNA or RNA nor did it significantly destabilize the duplexes formed. The modified oligonucleotide was 8-9-fold more resistant to snake venom phosphodiesterase than was the control oligonucleotide.

ST oligonucleotide analog antisense pharmaceutical; ribonucleotide alkylphosphonate alkylphosphonothioate oligonucleotide analog

IT Gene
RL: MSC (Miscellaneous)
(inhibition of expression of; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Cell
Mammal
(inhibition of gene expression in; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Pharmaceuticals
Virucides and Virustats
(oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Ribonucleic acids, messenger
RL: MSC (Miscellaneous)
(oligonucleotides hybridizing with; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Nucleotides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, 2'-substituted ribonucleoside-contg.; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Nucleotides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, ribonucleoside alkylphosphonate-contg.; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Nucleotides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, ribonucleoside alkylphosphonothioaate-contg.; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

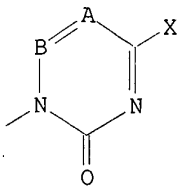
IT Nucleotides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligo-, analogs, oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

IT Microorganism
(pathogenic, inhibition of gene expression in; oligonucleotide analogs contg. ribonucleotide alkylphosphonates or alkylphosphonothioates and their use as pharmaceuticals)

L99 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1992:511996 HCAPLUS
DN 117:111996
TI Preparation of nuclease resistant, pyrimidine-modified oligonucleotides that detect and modulate gene expression
IN Cook, Philip Dan; Sanghvi, Yogesh Shantilal
PA Isis Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K048-00
ICS C07H021-00
CC 33-10 (Carbohydrates)
Section cross-reference(s): 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9202258	A1	19920220	WO 1991-US4681	19910701
	W: AU, BR, CA, FI, HU, JP, KR, NO, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2088258	AA	19920128	CA 1991-2088258	19910701
	AU 9187205	A1	19920302	AU 1991-87205	19910701
	AU 641565	B2	19930923		
	BR 9106702	A	19930608	BR 1991-6702	19910701
	EP 544824	A1	19930609	EP 1991-917951	19910701
	EP 544824	B1	19970611		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 06501389	T2	19940217	JP 1991-516590	19910701
	JP 08000074	B4	19960110		
	AT 154246	E	19970615	AT 1991-917951	19910701
	US 5614617	A	19970325	US 1993-971978	19930218 <--
PRAI	US 1990-558806		19900727		
	WO 1991-US4681		19910701		

OS MARPAT 117:111996
GI



Q

AB Oligonucleotide analogs having at least one modified pyrimidine base Q [X

= OH, NH2; A, B = CR, N; R = lower alkyl, CF3, F, CF2CF3, CF2CF2CF3, Cl, Br, iodo, NO2, OCF3, etc.; or one of A and B is defined above and the other = CH; or AB are part of a carbocyclic or heterocyclic ring fused to the pyrimidine ring through AB], which are nuclease resistant, were prepd. to inhibit gene expression. Thus 5'-AAATAGTGTTGCTGATCTTGAC-3' having 6-azathymidine substituted for each T nucleotide was synthesized and tested as an antisense oligonucleotide against RNase H.

ST oligonucleotide analog nuclease resistant; modified pyrimidine oligonucleotide nuclease resistant

IT Nucleotides, polymers
RL: RCT (Reactant); RACT (Reactant or reagent)
(oligo-, analogs, pyrimidine-modified, nuclease resistant, for inhibition of gene expression)

IT 9001-99-4, Ribonuclease 9003-98-9, Deoxyribonuclease
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of pyrimidine-modified oligonucleotides resistant to, for inhibition of gene expression)

IT 13410-30-5P 17331-64-5P 23701-73-7P 133128-06-0P 142234-17-1P 142234-18-2P 142246-62-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for pyrimidine-modified oligonucleotide for inhibition of gene expression)

IT 142234-16-0P 142461-12-9P 142461-13-0P 142461-14-1P 142461-15-2P
142461-16-3P 142461-17-4P 142461-19-6P 142461-20-9P 142461-21-0P
142461-22-1P 142461-23-2P 142461-31-2P 142461-32-3P 142461-33-4P
142461-34-5P 142461-35-6P 142461-36-7P 142461-37-8P 142461-38-9P
142461-45-8P 143042-76-6P 143042-77-7P 143042-78-8P 143042-79-9P
143042-82-4P 143042-84-6P 143042-86-8P 143042-87-9P 143042-88-0P
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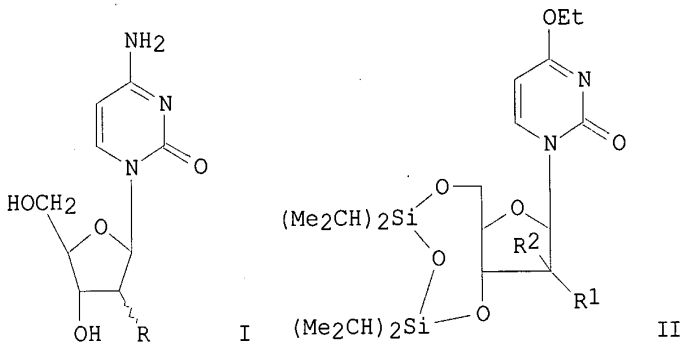
143043-14-5P 143043-15-6P 143043-16-7P 143043-19-0P 143043-21-4P
143043-25-8P 143043-77-0P 143043-95-2P 143043-97-4P 143044-05-7P
143044-47-7P 143062-99-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as nuclease resistant oligonucleotide for inhibition of gene expression)

IT **54-42-2**, 5-Iodo-2'-deoxyuridine **70-00-8**, Trifluorothymidine 75-77-4, Chlorotrimethylsilane, reactions 838-07-3, 5-Methyl-2'-deoxycytidine 932-53-6, 6-Azathymine 4330-21-6 40615-36-9, 4,4'-Dimethoxytrityl chloride 89992-70-1 142246-63-7 142246-64-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of pyrimidine-modified oligonucleotides for inhibition of gene expression)

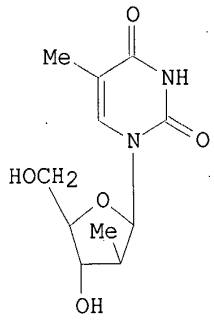
L99 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 1991:43319 HCAPLUS
DN 114:43319
TI Nucleosides and nucleotides. 94. Radical deoxygenation of tert-alcohols in 1-(2-C-alkylpentofuranosyl)pyrimidines: synthesis of (2'S)-2'-deoxy-2'-C-methylcytidine, an antileukemic nucleoside
AU **Matsuda, Akira**; Takenuki, Kenji; Sasaki, Takuma; Ueda, Tohru
CS Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
SO Journal of Medicinal Chemistry (**1991**), **34**(1), **234**-9
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
CC 33-1 (Carbohydrates)
OS CASREACT 114:43319

GI



I

II



III

AB (2'S And 2'R)-2'-deoxy-2'-C-methylcytidine (I; R = .beta., .alpha.-Me) and (2'S)-2'-deoxy-2'-C-ethylcytidine (I; R = Et) were synthesized from the corresponding 2'-C-alkylarabinofuranosyl- or -ribofuranosylpyrimidine derivs. (II ;R1 = F, R2 = OH; R1 = OH, R2 = Me, Et) and by radical deoxygenation of the Me oxalyl esters of the 2'-tert-alc., followed by sequential deblocking and amination at the 4-position. (2'S)-2'-Deoxy-2'-C-methyl-5-methyluridine (III) was also synthesized in a similar manner. Among them, I (R = .beta.-Me), exhibits the most potent cytotoxicity to L1210 cells with potency comparable to that of 1-.beta.-D-arabinofuranosylcytosine (I; R = .beta.-OH). The size of the 2'-substituents and the configuration at the 2'-position are the most important for the cytotoxicity. Cytotoxicity in vitro of I (R = .beta.-Me) against various human cancer cell lines was also examd. and compared with that of I (R = .beta.-OH).

ST radical deoxygenation alkylpentofuranosylpyrimidine tertiary alc; deoxymethylcytidine pyrimidine nucleoside antileukemic prepn; cytotoxicity deoxymethylcytidine; deoxymethyluridine cytotoxicity prepn; deoxyethylcytidine cytotoxicity prepn; alkylarabinofuransylpyrimidine acylation methyl oxalyl chloride; alkylribofuranosylpyrimidine acylation methyl oxalyl chloride; acylation alkylribofuranusylpyridimidine alkylarabinofuranosylpyrimidine oxalyl chloride

IT Neoplasm inhibitors
((alkylpentofuranosyl)pyrimidine)

IT Nucleosides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(alkylpentofuranosylpyrimidines, prepn. and cytotoxicity of)

IT Configuration
(of (alkylpentofuranosyl)pyrimidines, cytotoxicity in relation to)

IT Substituent effect

(on cytotoxicity of (alkylpentofuranosyl)pyrimidines)
IT Toxicity
(cyto-, of (alkylpentofuranosyl)pyrimidines)
IT Molecular structure-biological activity relationship
(cytotoxic, of (alkylpentofuranosyl)pyrimidines)
IT 115494-61-6 116918-63-9 119410-88-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, with Me oxalyl chloride)
IT 115494-49-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and acetylation of)
IT 115494-54-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and acylation of, with Me oxalyl chloride)
IT 115494-52-5P 115494-57-0P 130407-94-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and ammonolysis of)
IT 115494-64-9P 119410-83-2P 130466-80-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cytotoxicity of)
IT 115494-56-9P 115494-58-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deacetylation of)
IT 115494-51-4P 130407-92-0P 130407-93-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and desilylation of)
IT 119410-89-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrolysis of)
IT 115494-50-3P 115494-55-8P 130407-90-8P 130407-91-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and radical deoxygenation of)
IT 115494-63-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn., cytotoxicity, and antileukemic activity of)

=> fil medline
FILE 'MEDLINE' ENTERED AT 13:12:05 ON 02 JUN 2003

FILE LAST UPDATED: 31 MAY 2003 (20030531/UP). FILE COVERS 1958 TO DATE.

On April 13, 2003, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2003 vocabulary. See http://www.nlm.nih.gov/mesh/changes2003.html for a description on changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all

L100 ANSWER 1 OF 1 MEDLINE

AN 90272386 MEDLINE
DN 90272386 PubMed ID: 2349087
TI Abasic oligodeoxyribonucleoside phosphorothioates: synthesis and evaluation as anti-HIV-1 agents.
AU **Iyer R P**; Uznanski B; Boal J; Storm C; Egan W; Matsukura M; Broder S; Zon G; Wilk A; Koziolkiewicz M; +
CS Center for Biologics Evaluation and Research, Food and Drug Administration, Bethesda, MD.
SO NUCLEIC ACIDS RESEARCH, **(1990 May 25) 18** (10) **2855-9.**
Journal code: 0411011. ISSN: 0305-1048.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199007
ED Entered STN: 19900810
Last Updated on STN: 19970203
Entered Medline: 19900711
AB The syntheses and anti-HIV-1 evaluations of two, abasic oligodeoxyribonucleotide phosphorothioate analogs, d[Cps(Eps)26C] and d[Cps(Vps)26C] (where E and V derive from 1,2-dideoxy-D-ribofuranose and (+/-)-butane 1, 3-diol, respectively), are described.
CT Check Tags: Support, Non-U.S. Gov't
*Antiviral Agents: CS, chemical synthesis
Antiviral Agents: PD, pharmacology
Cell Line
Chemistry
Cytopathogenic Effect, Viral: DE, drug effects
*HIV-1: DE, drug effects
Molecular Structure
*Oligodeoxyribonucleotides: CS, chemical synthesis
Oligodeoxyribonucleotides: PD, pharmacology
*Thionucleotides: CS, chemical synthesis
Thionucleotides: PD, pharmacology
CN 0 (Antiviral Agents); 0 (Oligodeoxyribonucleotides); 0 (Thionucleotides)

=> d his

(FILE 'HOME' ENTERED AT 11:54:33 ON 02 JUN 2003)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 11:54:44 ON 02 JUN 2003
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L2 13 S E3-E5
E TOCE J/AU
L3 7 S E4,E5
E NADJI S/AU
L4 14 S E3,E4
E RELIABLE/PA,CS
L5 5 S E8-E12
L6 1 S L2-L5 AND L1
L7 31 S L2-L5 NOT L6
SEL RN L6

FILE 'REGISTRY' ENTERED AT 12:01:44 ON 02 JUN 2003
L8 60 S E1-E60
L9 2 S L8 AND PMS/CI
L10 18 S (ADENOSINE OR AZACYTIDINE OR CLADRIBINE OR DOXIFLURIDINE OR E
L11 13 S (CYTARABINE OR ACYCLOVIR OR VALACYCLOVIR OR PENCICLOVIR OR FA
L12 31 S L10,L11

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L13          28 S L8 NOT L9,L12
L14           8 S L13 AND OC4/ES
L15           6 S L13 AND SQL/FA
L16          14 S L13 NOT L14,L15
L17           2 S L16 AND NR>=5
L18           7 S 373645-97-7 OR 373645-98-8 OR 374576-35-9 OR 374576-36-0 OR 3
L19          38 S L12,L18
L20          23 S L8 NOT L19

     FILE 'HCAPLUS' ENTERED AT 12:22:52 ON 02 JUN 2003

     FILE 'HCAPLUS' ENTERED AT 12:23:20 ON 02 JUN 2003

     FILE 'REGISTRY' ENTERED AT 12:23:50 ON 02 JUN 2003
L21          39 S L15,L19

     FILE 'HCAPLUS' ENTERED AT 12:23:54 ON 02 JUN 2003
L22       42441 S L21
L23        2475 S L22 AND ?POLYM?
L24          63 S L22 AND POLYM?/SC,SX
L25        2485 S L23,L24
L26          96 S L21/P AND L25
L27         166 S L21/D AND L25
L28          53 S L21/DP AND L25
L29         209 S L26-L28
L30         263 S L22 (L) ?CONJUGAT?
L31          33 S L29 AND L30
L32           4 S L1-L7 AND L22

     FILE 'REGISTRY' ENTERED AT 12:26:26 ON 02 JUN 2003
L33           1 S 373645-92-2
L34          40 S L21,L33

     FILE 'HCAPLUS' ENTERED AT 12:27:40 ON 02 JUN 2003
L35       42441 S L34
L36           4 S L35 AND L32
L37           1 S L36 AND 63/SC,SX
L38        2657 S L34/P OR L34/D OR L34/DP
L39         209 S L38 AND L25
L40          55 S L39 AND ?CONJUGAT? NOT L32,L36
L41          46 S L40 AND (1 OR 63)/SC,SX
L42        9223 S L34 (L) THU/RL
L43       10645 S L34 (L) (PAC OR PKT OR BAC)/RL
L44          69 S L42,L43 AND L39
L45          34 S L40 AND L44
L46          48 S L41,L45 NOT L36
L47          28 S L46 AND POLYM?/CW
L48           4 S L46 AND POLYM?/SC,SX
L49          29 S L47,L48
L50          19 S L46 NOT L49
L51          37 S L46 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
L52          25 S L51 AND L49
L53          12 S L51 NOT L52
L54           6 S L52 AND (NUCLEOSIDE? OR POLYNUCLEOTIDE? OR NUCLEOTIDE?)/CW
L55          19 S L52 NOT L54

     FILE 'REGISTRY' ENTERED AT 12:40:41 ON 02 JUN 2003
L56           1 S 30811-80-4
L57          12 S 74-88-4 OR 75-77-4 OR 98-88-4 OR 121-44-8 OR 288-88-0 OR 429-
L58           7 S 82845-99-6 OR 120401-14-1 OR 173099-61-1 OR 373645-93-3 OR 37

     FILE 'HCAPLUS' ENTERED AT 12:43:17 ON 02 JUN 2003
L59        1311 S L56
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L60          32 S L59 AND ?CONJUGAT?
L61          32 S L60 AND (PY<=20000509 OR PRD<=20000509 OR AD<=20000509)
L62          32 S L61 NOT L46-L55
                SEL DN AN 5 15
L63           2 S L62 AND E61-E66
L64           2 S L6,L37,L63 AND L1-L7,L22-L32,L35-L55,L59-L63
L65       43716 S L22,L35,L59
L66         362 S L57,L58 AND L65
L67         267 S (L57 OR L58)(L)(RCT OR RACT OR RGT)/RL AND L65
L68          27 S L67 AND ?CONJUGAT?
L69          45 S L67 AND ?POLYM?
L70          13 S L68 AND L69
L71          12 S L70 NOT L64
L72         967 S L65 AND (PRODRUG? OR PRO DRUG?)
L73          86 S L72 AND ?POLYM?
L74          10 S L72 AND POLYM?/SC,SX
L75          84 S L73,L74 AND (1 OR 63)/SC,SX
L76          34 S L75 AND ?CONJUGAT?
L77          19 S L76 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
                SEL DN AN 9
L78           1 S E67-E69
L79           3 S L64,L78
L80           4 S L65 AND (A61K031-7125 OR A61K031-7115 OR A61K031-712)/IC,ICM,
L81         191 S L65 AND C07H021/IC,ICM,ICS
L82          51 S L81 AND ?POLYM?
L83           3 S L81 AND POLYM?/SC,SX
L84          40 S L82,L83 AND (PD<=20000509 OR PRD<=20000509 OR AD<=20000509)
L85          12 S L84 AND (PHOSPHODIESTER? OR PHOSPHOROTHIO? OR PHOSPHONATE OR
L86           7 S L85 AND (1 OR 63)/SC,SX
L87           5 S L86 AND ?CONJUGAT?
L88           7 S L79,L87 AND L1-L7,L22-L32,L35-L55,L59-L87
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 13:07:13 ON 02 JUN 2003
L89          59 S E70-E128
L90          40 S L89 AND L34,L56

     FILE 'REGISTRY' ENTERED AT 13:07:46 ON 02 JUN 2003
L91          19 S L89 NOT L90

     FILE 'HCAPLUS' ENTERED AT 13:08:37 ON 02 JUN 2003
L92           1 S BUFF ?/AU AND 1998/PY AND (8 AND 5 AND 521)/SO
L93           1 S BUFF ?/AU AND 1999/PY AND (18 AND 1387)/SO
L94           4 S (US5614617 OR WO9967378 OR US5457187 OR WO9417093)/PN
L95           1 S LIU ?/AU AND 1999/PY AND (18 AND 1789)/SO
L96           1 S MATSUDA ?/AU AND 1991/PY AND (34 AND 234)/SO
L97           1 S YOSHIMURA ?/AU AND 1995/PY AND (14 AND 427)/SO
L98           2 S L92-L97 AND L65
L99           9 S L92-L98

     FILE 'MEDLINE' ENTERED AT 13:11:37 ON 02 JUN 2003
L100          1 S IYER ?/AU AND 1990/PY AND (18 AND 2855)/SO

     FILE 'HCAPLUS' ENTERED AT 13:11:53 ON 02 JUN 2003

     FILE 'MEDLINE' ENTERED AT 13:12:05 ON 02 JUN 2003

=> fil wpix
FILE 'WPIX' ENTERED AT 17:47:52 ON 02 JUN 2003
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FILE LAST UPDATED:          29 MAY 2003      <20030529/UP>
MOST RECENT DERWENT UPDATE:     200334        <200334/DW>
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GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

=> d 140 all abeq tech abex tot

L40 ANSWER 1 OF 3 WPIX (C) 2003 THOMSON DERWENT
AN **2002-066591** [09] WPIX
DNC **C2002-019865**
TI **Heteropolymeric** compounds containing pharmaceutically active **monomeric** nucleosides or derivatives, are useful as **prodrugs** with antiviral, anticancer or antimicrobial activity.
DC B02 B03 D16
IN NADJI, S; SAMPATH, U; TOCE, J A
PA (RELI-N) RELIABLE BIOPHARMACEUTICALS INC; (RELI-N) RELIABLE BIOPHARMACEUTICAL INC
CYC 95
PI WO 2001085751 A1 20011115 (200209)* EN 82p C07H021-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
US 2002013287 A1 20020131 (200210) A61K048-00 <--
AU 2001059706 A 20011120 (200219) C07H021-00 <--
ADT WO 2001085751 A1 WO 2001-US15106 20010509; US 2002013287 A1 Provisional US 2000-202795P 20000509, US 2001-853047 20010509; AU 2001059706 A AU 2001-59706 20010509
FDT AU 2001059706 A Based on WO 200185751
PRAI US 2000-202795P 20000509; US 2001-853047 20010509
IC ICM A61K048-00; **C07H021-00**
ICS **A61K031-7115; A61K031-712; A61K031-7125** ; A61P031-00; A61P035-00; C07F009-655; **C07H019-06; C07H019-10; C07H021-02; C07H021-04**
AB WO 200185751 A UPAB: 20020208
NOVELTY - **Heteropolymeric** compounds comprising a chain of pharmaceutically active, **monomeric** nucleosides, nucleoside analogs, abasic nucleosides or heterocyclic derivatives linked by a phosphodiester group comprising a 3'- or 5'-terminal moiety, phosphorothioate group of H-, alkyl- or alkenyl-phosphonate group.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:
(i) a method of treating viral infections comprising administration of the **polymer;**
(ii) a method of treating cancer comprising administration of the **polymer;**

(iii) a method of treating microbial infections comprising administration of the **polymer**;
(iv) compositions comprising the **polymer**;
(v) **heteropolymeric** compounds of formula (I);
(vi) compounds of formula (II);
(vii) compounds of formula (III); and
(viii) compounds of formula (IV).
R1 = optionally pharmaceutically active nucleoside, analog or heterocyclic derivative;
R2 = H, OR5, R5, NR5R6, N3, X or SR5;
R5, R6 = H, 1-35C alkyl, 2-35C alkenyl, 3-35C cycloalkyl, 1-35C alkoxy, 1-35C alkylamino, 2-35C ether, 2-35C thioether, aryl, 6-35C non-aromatic heterocyclyl or heteroaryl;
X = Cl, Br, F or I;
R3 = O or S;
R4 = O-, when R3 = S or 1-5C alkyl, 1-5C alkenyl or O- when R3 = O;
n = 1-100, all optionally substituted by halo, OH, NH2, acyloxy or COOH.
R = 1-35C alkyl, 1-35C alkenyl, 3-35C cycloalkyl, 1-35C alkoxy, 1-35C alkylamino, 2-35C ether, 2-35C thioether, 2-35C alkenyloxy, aryl, 6-35C non-aromatic heterocyclyl or heteroaryl all optionally substituted by halo, OH, NH2, acyloxy or COOH.
R2' = COR;
R' = 1-35C alkyl, 3-35C cycloalkyl, 1-35C alkoxy, 1-35C alkylamino, 2-35C ether, 2-35C thioether, 2-35C alkenyl, 2-35C alkenyloxy, aryl, 6-35C non-aromatic heterocyclyl or heteroaryl all optionally substituted by halo, OH, NH2, acyloxy or COOH.
R'' = H, 1-35C alkyl, 2-35C alkenyl, 3-35C cycloalkyl, 1-35C alkoxy, 2-35C alkenyloxy, 1-35C alkylamino, 2-35C ether, 2-35C thioether, aryl, 6-35C non-aromatic heterocyclyl or heteroaryl.
ACTIVITY - Virucide; cytostatic; antibacterial.
None given.
MECHANISM OF ACTION - None given.
USE - The **polymers** are useful as **prodrugs** with antiviral, anticancer or antimicrobial activity.
ADVANTAGE - The novel **polymers** provide a safe and relatively inexpensive method for administering the active agents and lead to administration of a reduced dosage which degrades in an controlled manner to release the drug over time.
Dwg.0/11

FS CPI
FA AB; GI; DCN
MC CPI: **B04-B03**; **B04-E01**; **B05-B01J**; B14-A01; B14-A02; B14-H01B; **D05-H12B2**

TECH UPTX: 20020208
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation: By conventional synthesizer techniques.
Preferred Components: The nucleosides are preferably **adenosine**, 5-**azacytidine**, **cladribine**, **cytarabine**, **doxifluridine**, **enocitabine**, **floxuridine**, **fludarabine**, **gemcitabine**, **pentostatin**, **brivudine**, **edoxudine**, **fiacitabine**, **fialuridine**, **ibacitabine**, **idoxuridine**, **ribavarin**, **trifluridine** or **vidarabine**. The nucleoside analogs are preferably **carbacyclic analog** or **L-nucleosides**, especially **acyclovir**, **valacyclovir**, **penciclovir**, **famciclovir**, **ganciclovir**, **cidofovir**, **adefovir**, **lobucavir** or **ribavirin**.
The nucleobases are preferably mercaptopurine, thioguanine or azathioprine. The chain preferably comprises 2 to 100 **monomer** units, at least one of which is antiviral, antimicrobial or is active against cancer.

ABEX UPTX: 20020208
ADMINISTRATION - Preferably orally or parenterally.

EXAMPLE - The oligonucleotide was synthesized on a Perseptive Expedite 8909 DNA synthesizer using 1 micromole scale standard protocol. The oligo was deprotected with 1 ml of concentrated ammonium hydroxide at 55degreesC for 18 hours, concentrated, purified with 20 % polyacrylamide gel and desalted with C-18 cartridge to give (cytarabne-pO)15-dC.

L40 ANSWER 2 OF 3 WPIX (C) 2003 THOMSON DERWENT
AN **2000-182393** [16] WPIX
CR 2003-138122 [13]
DNC **C2000-057039**
TI Oligonucleotides having chiral R- and S- phosphorothioate internucleoside linkage regions, used as, e.g. antisense agents in therapy and diagnostics.
DC B02 B03 B04 D16
IN COOK, P D; MANOHARAN, M
PA (ISIS-N) ISIS PHARM INC
CYC 87
PI WO 2000004034 A2 20000127 (200016)* EN 115p C07H000-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9951022 A 20000207 (200029) C07H000-00
EP 1097162 A2 20010509 (200128) EN C07H001-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 6242589 B1 20010605 (200133) C07H021-04 <--
US 2001027251 A1 20011004 (200161) C07H021-04 <--
JP 2002520420 W 20020709 (200259) 111p C07H021-04 <--
ADT WO 2000004034 A2 WO 1999-US15960 19990714; AU 9951022 A AU 1999-51022 19990714; EP 1097162 A2 EP 1999-935570 19990714, WO 1999-US15960 19990714; US 6242589 B1 US 1998-115027 19980714; US 2001027251 A1 Div ex US 1998-115027 19980714, US 2001-805630 20010314; JP 2002520420 W WO 1999-US15960 19990714, JP 2000-560140 19990714
FDT AU 9951022 A Based on WO 200004034; EP 1097162 A2 Based on WO 200004034; US 2001027251 A1 Div ex US 6242589; JP 2002520420 W Based on WO 200004034
PRAI US 1998-115027 19980714; US 2001-805630 20010314
IC ICM C07H000-00; C07H001-00; **C07H021-04**
ICS **A61K031-7125**; A61K048-00; C07H001-02; **C07H019-10**; C07H019-20; **C07H021-02**; C12Q001-68
AB WO 200004034 A UPAB: 20030224
NOVELTY - Oligonucleotides having chiral R- and S- phosphorothioate internucleoside linkage regions, and their chiral intermediates are new.
DETAILED DESCRIPTION - New oligomeric compound of formula (I) comprises covalently-bound nucleosides:
5'-T1-(Nu-Sp)n-(Nu-Lp)m-(Nu-Sp)p-Nu-T2-3'
SP = a chiral S-phosphorothioate internucleoside linkage;
LP = a chiral R-phosphorothioate internucleoside linkage;
n, m = 1-100;
p = 0-100; so that
n + m + p = 3-200;
T1, T2 = = hydroxy (optionally protected), a nucleoside, nucleotide, oligonucleoside, or oligonucleotide, a covalent attachment to a solid support, a **conjugate** group, or a substituent at 5' or 3';
NU = a 3',5'-connected nucleoside group (a);
Bx = a heterocyclic base; and
R1 = H, or hydroxy or other 2'-substituent (both optionally protected):

INDEPENDENT CLAIMS are also inlcuded for the following:
(1) nucleosides with a chiral 3'-attached auxiliary group, of formula (II);
(2) oligonucleotides containing a phosphorothioate ester group capable of internal cyclization, of formula (III);
(3) preparation of (I) by:
(a) providing a protected nucleoside on a solid support, of formula (IV);
(b) deprotecting the 5'-hydroxy;
(c) optionally (i.e., if segment synthesis is not complete) reaction with (II) and a condensing agent to form an extended compound;
(d) optionally repeating (b) and (c);
(e) reaction at the deprotected 5'-hydroxy step with a protected nucleoside of formula (V) and a condensing agent to form a further extended compound;
(f) deprotecting the 5'-hydroxy group;
(g) optionally repeating deprotection and condensation (e) and (f) to add further nucleosides (V), until the R-segment is complete;
(h) deprotecting the 5'-hydroxy;
(i) treating the deprotected hydroxy with (II) and a condensing agent to extend the chain, and
(j) optionally repeating (h) until the third segment is complete, to form (I):
R4 = a hydroxy or a labile protecting group; and
R2 = an SP chiral auxiliary group
q = 0-50;
R62 = H or a protecting group;
R64 = H, a protecting group, or a linker to a solid support; and
R63 = a 4-methyl-4-thiol-pentan-2-yl ester group (a), or a pulegonyl ester containing an amino or thiol group (b)-(e);
R3 = an attachment to a solid support;
R5 = an RP chiral auxiliary group or an activated phosphorus group:
ACTIVITY - Antisense;
MECHANISM OF ACTION - The compounds which are antisense to a DNA or RNA segment modulate production and activity of a particular protein in the organism, which may be undesired and lead to a disease. Due to the multiplicity of phosphorothioate linkages, the compounds are resistant to nuclease degredation.
USE - (I) are of value as both therapeutic and diagnostic agents, optionally as kits, in disorders, and as research tools. The last includes polymerase chain reactions (PCR) applied in diverse areas, including forensics, paleontology, evolutionary studies, and genetics; DNA sequencing and amplification, and mutagenesis of cloned DNA. Single cells, cell populations, organelles, bacteria, fungi, protozoa, algae, plants, and animals, including humans, requiring DNA-RNA transcription or RNA-protein translation in their hereditary, metabolic, or cellular control can be included within the definition of organisms which can be treated with the compounds, and treatment includes prophylaxis in high risk cases. The compounds are also of value as diagnostic agents. These may also be used for reduction of ICAM-1 inflammatory protein, also VCAM-1, and ELAM-1 endothelial proteins in treatment of inflammatory disorders including psoriasis, lichen planus, contact dermatitis, and drug eruption, also in inhibition of protein kinase C to inhibit cell proliferation and tumorigenesis, including metastasis. The compounds may also be of value in antiviral and antifungal applications including HIV and Lyme disease.
ADVANTAGE - The phosphorothioate merely provides increased stability.
Dwg.0/7

FS CPI
FA AB; GI; DCN
MC CPI: **B04-B03B; B04-B03C;** B11-C08E5; B12-K04F; B14-A01; B14-A02; B14-A03; B14-A04; B14-H01; D05-H09; D05-H12D2; D05-H18A; D05-H18B

TECH UPTX: 20000330
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Compounds: The auxiliary in (II) is a 2,1,3-phospho-dihetero 6-ring group, optionally fused to (+)- or (-)- pulegone. Labile protecting groups are trityl and its mono- or di-methoxy derivatives, and 9-phenylxanthene. The heterocyclic base is a purine or pyrimidine, particularly **adenosine**, guanosine, uridine, 5-methyluridine, cytidine, 5-methylcytidine, or thymine. Activated phosphorus groups are phosphoramidate, H-phosphonate, and phosphate triester. Attachment to the solid support is a sarcosinylsuccinoyl linker.
ABEX UPTX: 20000330
ADMINISTRATION - Includes oral, by injection, or topical. Amounts are 10 ng to 100 g per kg, once or more daily; prophylactic maintenance doses may subsequently be required.

L40 ANSWER 3 OF 3 WPIX (C) 2003 THOMSON DERWENT
AN **1992-163752** [20] WPIX
TI **Adenosine** mono phosphate trimer contg. 8-hydroxy **adenosine**-5'-phosphate - used for protein synthesis inhibitor, obtd. by refining 5-hydroxy **adenosine**-5'-mono phosphate with imidazole in presence of tri phenyl phosphine.
DC B02
PA (MIYO) MIYOSHI YUSHI KK
CYC 1
PI JP 04103597 A 19920406 (199220)*
JP 3042540 B2 20000515 (200028) 9p C07H021-02 <--
ADT JP 04103597 A JP 1990-218709 19900820; JP 3042540 B2 JP 1990-218709 19900820
FDT JP 3042540 B2 Previous Publ. JP 04103597
PRAI JP 1990-218709 19900820
IC A61K031-70; B01J031-04; C07B061-00; **C07H021-02**; C12N009-99
ICM **C07H021-02**
ICS A61K031-70; **A61K031-7115**; A61P031-12; A61P035-00; A61P043-00; B01J031-04; C07B061-00; C12N009-99
AB JP 04103597 A UPAB: 19931006
Prepn. of a trimer (I) contg. 8-hydroxy **adenosine**-5'-phosphate of the formula (a) involves reating 8-hydroxyadenosine-5'-monophosphate of formula (c) with imidazole in the presence of triphenylphosphine (IV) and dipyridyl disulphide (V) to give 8-hydroxyadenosine 5'-phosphoroimidazolitate of formula (d) (III); then trimerising (III) in a bufer soln. having a pH of 6.8 to 7.0 in the presence of uranyl acetate catalyst; and then hydrolysing.
USE/ADVANTAGE - The compsn. is used in a protein synthesis inhibitor it is highly resistant against the decomposing activity of enzymes and is useful as an antiviral agent and an anticancer agent.
In an example, (III) was prepd by the usual method and 0.28g of it is added to 0.2M N-ethylmorpholine acetate buffer contg. 0.5 mM uranyl acetate to a concn. of 50 mM and the mixt is allowed to stand at 22 deg C for 24 hrs. After the **monomer** disappears, 2.5. ml Dowez 50W-X8 (Na+) was added and the mixt was filtered. The filtrate was concn. in-vacuo and the residue was added to ethanol. The ppte formed was centrifuged and washed with ethanol and diethyl ether and dried in-vacuo then dissolved in 15ml 0.02M ammonium acetate. 150 micro l of 2.5 mg/ml Nuclease P1 was added to the soln. and incubated at 37 deg C for 24 hrs. Nuclease P1 was inactivated and the aq. layer was washed and conc in-vacuo. the residue was purified by a Sephadex A-25 column and elution by 0 to 0.8M triethylamine carbonate gradient.
FS CPI
FA AB; GI; DCN
MC CPI: **B04-B03B**; B12-A06; B12-G07; N03-A

=> d his

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(FILE 'HOME' ENTERED AT 17:11:49 ON 02 JUN 2003)
           SET COST OFF

FILE 'WPIX' ENTERED AT 17:12:09 ON 02 JUN 2003
           E US20020013287/PN
L1            1 S E3
L2        30139 S (B04-B03? OR C04-B03? OR B04-E01? OR C04-E01?)/MC
L3        24523 S C07H021/IC,ICM,ICS
L4          427 S C07H021/ICA,ICI
L5        48247 S L2-L4
L6         1013 S C07H019-06/IC,ICM,ICS,ICA,ICI AND L5
L7          613 S C07H019-10/IC,ICM,ICS,ICA,ICI AND L5
L8           63 S L5 AND A61K031-7115/IC,ICM,ICS,ICA,ICI
L9          129 S L5 AND A61K031-7125/IC,ICM,ICS,ICA,ICI
L10          84 S L5 AND A61K031-712/IC,ICM,ICS,ICA,ICI
L11         225 S L5 AND (B05-B01J OR C05-B01J)/MC
L12           3 S L11 AND L8-L10
L13           9 S D05-H12B2/MC AND L8-L11
L14        5162 S (ADENOSIN# OR AZACYTIDIN# OR CLADRIBIN# OR CYTARABIN# OR DOXI
L15         896 S (CARBACYCLIC ANALOG? OR L NUCLEOSIDE OR ACYCLOVIR? OR ACICLOV
L16        5930 S L14,L15
L17          10 S L16 AND L8-L10
L18          55 S L16 AND D05-H12B2/MC
L19         129 S L16 AND (B05-B01J OR C05-B01J)/MC
L20           2 S L19 AND L17,L18
L21           2 S L19 AND C07H019/IC,ICM,ICS
L22         849 S L16 AND ?POLYM?/BIX
L23          55 S L16 AND ?MONOMER?/BIX
L24         868 S L22,L23
L25           5 S L24 AND (A61K031-7115 OR A61K031-7125 OR A61K031-712)/IC,ICM,
L26         257 S (RIBAVIRIN? OR FIACITABIN?)/BIX
L27        6099 S L16,L26
L28          13 S L27 AND (A61K031-7115 OR A61K031-7125 OR A61K031-712)/IC,ICM,
L29         130 S L27 AND (B05-B01J OR C05-B01J)/MC
L30           1 S L29 AND L28
L31          13 S L28,L30
L32         911 S L27 AND (?POLYM? OR ?MONOMER?)/BIX
L33           6 S L32 AND L28
              SEL DN AN 2 5 6
L34           3 S L33 AND E1-E5
L35           3 S L1,L34
L36           7 S L31 NOT L33-L35
L37         241 S L16 AND ?CONJUGAT?/BIX
L38         283 S L27 AND (PRODRUG? OR PRO DRUG?)/BIX
L39           2 S L38 AND L28
L40           3 S L35 AND L1-L39
L41         294 S L27 AND A61K048/IC,ICM,ICS
L42          10 S L41 AND D05-H12B2/MC

FILE 'WPIX' ENTERED AT 17:47:52 ON 02 JUN 2003
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